

# Feasibility Study for a Harmonised Information Management Infrastructure for Biodiversity-related Treaties

Prepared by the  
World Conservation Monitoring Centre

On behalf of  
UNEP, CBD, CITES, CMS, Ramsar Convention, WHC



CONVENTION ON  
BIOLOGICAL DIVERSITY



WORLD CONSERVATION  
MONITORING CENTRE



# Feasibility Study for a Harmonised Information Management Infrastructure for Biodiversity-related Treaties

Compiled by the  
World Conservation Monitoring Centre



WORLD CONSERVATION  
MONITORING CENTRE

## Authors

**Timothy H. Johnson, Ian K. Crain, Martin V. Sneary**

With support from

**United Nations Environment Programme (UNEP), Convention on Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on Migratory Species of Wild Animals (CMS), The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention), and the Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC),**





Digitized by the Internet Archive  
in 2010 with funding from  
UNEP-WCMC, Cambridge

## CONTENTS

ACKNOWLEDGEMENTS .....	2
EXECUTIVE SUMMARY .....	3
1 INTRODUCTION .....	5
1.1 Background .....	5
1.2 Scope and purpose .....	6
2 INFORMATION NEEDS AND INFORMATION FLOW ANALYSIS .....	7
2.1 Information needs implied by the convention articles and decisions .....	7
2.2 Information from contracting Parties (reporting requirements) .....	10
2.3 Information from other sources .....	13
2.4 Information flow between conventions .....	13
2.5 Information flow from secretariats to Parties .....	13
3 NEED FOR INFORMATION MANAGEMENT CAPACITY .....	15
3.1 Current capacity .....	15
3.2 Common issues and needs .....	15
4 OPTIONS FOR HARMONISATION .....	17
5 IMPLEMENTATION RECOMMENDATIONS .....	19
5.1 Developing a harmonised convention information resource .....	19
5.2 Streamlining national reporting to, and implementation of, conventions .....	23
5.3 Developing a lessons-learned network .....	25
6 OVERALL PROCESS ISSUES .....	29
7 CONCLUSIONS .....	31
APPENDIX I – TERMS OF REFERENCE .....	33
APPENDIX II – PROJECT METHODOLOGY .....	41
APPENDIX III – INFORMATION NEEDS OF THE CONVENTIONS .....	43
APPENDIX IV – PARTIES TO THE CONVENTIONS .....	65
APPENDIX V – COMMENTS FROM THE SECRETARIATS ON INFORMATION MANAGEMENT ISSUES AND NEEDS .....	71
APPENDIX VI – WORKSHOP DISCUSSION PAPERS .....	73
APPENDIX VII – WORKSHOP OUTPUTS .....	97

## ACKNOWLEDGEMENTS

This *Feasibility Study* was undertaken with support from the following Secretariats: Convention on Biological Diversity; Convention on International Trade in Endangered Species of Wild Fauna and Flora; Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar) and the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage); and the UN Environment Programme. The Ministry of Environment, Government of Belgium provided support on behalf of the Convention on Migratory Species of Wild Animals.

The UNEP Regional Office for Europe kindly provided facilities for the Workshop in Geneva.

WCMC also acknowledges Wetlands International who assisted in providing a perspective on information management for Ramsar.

The project was supervised by Tim Johnson, and undertaken by Ian Crain, Tim Johnson and Martin Sneary. Administrative support was provided by Julie Reay. Contributions to project development and implementation from Mark Collins, Jerry Harrison and other staff at WCMC are acknowledged.

## EXECUTIVE SUMMARY

The five biodiversity-related treaty secretariats and UNEP commissioned WCMC to undertake a *Feasibility Study* to identify opportunities for harmonising information management. The study responds to the growing realisation that decisions on development and sustainability depend on access to well organised information, and that the secretariats could collaborate more closely to gain synergies, avoid duplication and reduce the burden of reporting carried out by the Parties to the conventions.

The *Feasibility Study* involved the Secretariats of: the Convention on Biological Diversity (CBD); Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); Convention on Migratory Species of Wild Animals (CMS); Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar) and the Convention Concerning the World Cultural and Natural Heritage (WHC). It considered effectiveness and efficiency in the gathering, handling, disseminating and sharing of information.

The *Feasibility Study* identified three programmes of work to improve information management:

- Development of a harmonised conventions information resource
- Streamlined national reporting to facilitate national reporting to, and implementation of, the Conventions
- Development of a shared lessons-learned network

They would be taken forward through:

- preparation of a GEF PDF (Project Development Funding) proposal addressing harmonised reporting requirements, and the development and pilot testing of integrated national reporting guidelines for the biodiversity related conventions
- development of funding proposals for considerations by bilateral agencies covering actions needed to develop an inter-convention web site and search engine, and the development of a lessons-learned network
- increased collaboration of the programme and technical staff of the secretariats to share experiences

Recognising the need for broader synergies, a follow-on study is recommended to involve the other Rio treaties and regional agreements.



## 1 INTRODUCTION

### 1.1 Background

Many nations have confirmed their commitment to the principles of Agenda 21 by ratifying the Convention on Biological Diversity (CBD) and other treaties related to biodiversity conservation such as the Conventions on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Migratory Species of Wild Animals (CMS), Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar) and the Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC). They have also ratified treaties relating to broader environmental issues such as the Montreal Protocol and the United Nations Convention to Combat Desertification (CCD) and the United Nations Framework Convention on Climate Change (FCCC).

There is now a broad and growing realisation that decisions on development and sustainability depend on access to well organised **information** (such as inventories of biological resources, indicators of sustainable use and indigenous knowledge). The information that nations must organise and manage to respond to the specific and implied requirements of the treaties is complex and transcends conventional sectoral divisions. It places a demand on national implementing agencies and on those bodies that serve them to build capacity to manage information effectively.

The development of such enabling capacity is taxing to all nations, particularly developing countries. National information management infrastructure needs to be developed efficiently to serve both strategic and operational needs, as well as the reporting obligations to the relevant treaties. There is a growing demand for the ability to **combine and integrate** biodiversity-related data and to share the benefits of advanced technology deriving from a wide variety of publicly funded biodiversity initiatives.

Parties are seeking better access to each other's technology and data through such mechanisms as the CBD Clearing House Mechanism (CHM). Parties also seek feedback from treaty secretariats – comparative data from other parties that could contribute to early warning of regional problems, clarify priorities and provide the basis for monitoring progress towards objectives.

Submissions and reports from the parties constitute much of the information that secretariats manage. The secretariats have an obligation to be as efficient and responsive as possible in managing this information. Its application should facilitate national activities and be compatible with the approaches of associated agencies such as GEF, UNDP, UNEP and World Bank. Increasingly, parties are calling for secretariats to collaborate more closely to gain synergies and to avoid duplication. For example, Decision II/13 of the CBD Conference of Parties:

*Requests the Executive Secretary to co-ordinate with the Secretariats of relevant biodiversity-related conventions, with a view to:*

*(a) facilitating exchange of information and experience;*

(b) Exploring the possibility of recommending procedures for harmonising, to the extent desirable and practicable, the reporting requirements of Parties.....

Responding to the interest and momentum evident in Decisions from CBD Conferences of the Parties (CoPs), the five biodiversity-related treaty secretariats (CBD, CITES, CMS, Ramsar and World Heritage) and UNEP commissioned WCMC to undertake a *Feasibility Study* to identify opportunities for harmonising information management between the treaties. This report is the final output from the study.

## 1.2 Scope and purpose

The *Feasibility Study* considered approaches towards the development of a **harmonised information management infrastructure** for the biodiversity-related treaties within their existing defined mandates. Its purpose was to consider how the treaty secretariats could improve effectiveness and efficiency in the gathering, handling, disseminating and sharing of information. The Terms of Reference for the project are given in Appendix I, and an outline of the project methodology is given in Appendix II. The treaties involved were:

- Convention on Biological Diversity (CBD)
- Convention on International Trade in Endangered Species (CITES)
- Convention on Migratory Species (CMS)
- Convention on Wetlands of International Importance (Ramsar)
- World Heritage Convention (WHC): Natural Sites

Recognising the close connections between the *Feasibility Study* and initiatives to explore synergies between the Rio treaties, the secretariats of the FCCC and the CCD were invited to participate as observers at the Workshop where options were reviewed.

The *Feasibility Study* did not extend to considering country-level activities. The study is however conceived as a key contribution to country-focussed capacity building, and the development of harmonised national reporting.

## 2 INFORMATION NEEDS AND INFORMATION FLOW ANALYSIS

### 2.1 Information needs implied by the convention articles and decisions

An increased understanding of the information requirements of each convention and an improved understanding of the linkages between them could lead to greater synergy. Activities taken primarily in response to the articles of one convention may equally be of significance to another convention. Where information is shared, a standard approach to the collection of such data would enable the data to be used easily for more than one convention. It would facilitate the production of cross convention summaries (where there are links) and may serve to encourage greater coordination between national agencies/focal points.

The articles of each convention together with the decisions and other documents relating to implementation were reviewed and the information requirements documented. This covered not only the information required in national reporting, but all the information required to implement the convention. A detailed table of the information requirements of each convention is given in Appendix III, and a summary is given below (Table 1).

CBD has broad information requirements. Ramsar has a focus on wetlands of international importance but its promotion of the wise use concept implies broad information requirements. Each of the other three conventions has a particular focus: CITES and CMS are clearly targeted at species while World Heritage is directed at sites. Commonalities would be expected between these pairs, and are indeed apparent. Table 1 illustrates that successful implementation of each convention relies upon a wide range of fundamental data sets. Certain data are unique to one convention, for example the permit details and trade data required for CITES. However, there are a number of fundamental data sets that are required by more than one convention and also a number required by all five conventions.

CBD requires information on the full spectrum of biodiversity: ecosystems and habitats, species and communities and described genomes and genes of social, scientific or economic importance. Of these, only species data are significantly required by the other conventions, although the habitat present at sites is also important for Ramsar and World Heritage.

CITES and CMS require species information and they share approximately 445 species. For CMS this represents approximately 25% of the species listed. Details are required by both conventions on the scientific name, conservation and protection status, range, distribution, population data (including size and trends), habitat requirements, threats and *in situ* conservation/management activities. The main area of difference concerns use of species, especially relating to trade. This is an important data set for CITES, but is less relevant to CMS.

CMS is implemented to a large extent through Agreements concluded under its auspices for large taxonomic groups, or in some case, individual species. Each of these Agreements has its own information requirements which may be much more specific than the more general requirements of the parent convention. (These

Agreements were not included in the *Feasibility Study*, although two are treated in Appendix III. A full listing of active agreements can be found on the CMS web site at <http://www.wcmc.org.uk>.

Table 1: Summary of main information requirements

Information	CBD	CITES	CMS	Ramsar	WHC
<b>ECOSYSTEMS</b>					
Ecosystems and habitats					
ecosystems	✓				
habitat types	✓			✓	✓
traditional use	✓				
<b>SPECIES</b>					
Classification, names and identification					
higher taxonomy	✓	✓	✓	✓	
scientific name	✓	✓	✓	✓	✓
common names	✓	✓	✓	✓	
identification materials		✓	✓	✓	
Status					
conservation status	✓	✓	✓	✓	✓
protection status (national and international)	✓	✓	✓	✓	
Ecology					
range and distribution	✓	✓	✓	✓	✓
population data (size and trends)	✓	✓	✓	✓	✓
habitat requirements/availability	✓	✓	✓	✓	✓
migration routes	✓		✓	✓	
<i>In situ</i> and management activities					
legislation	✓	✓	✓		
<i>in situ</i> conservation and management activities	✓	✓	✓	✓	
Threats					
threats (direct, habitat destruction, indirect, etc)	✓	✓	✓	✓	✓
illegal trade		✓	✓		
invasive/exotic species	✓		✓		
Use					
use of species (medicinal, agricultural, economic etc)	✓	✓	✓	✓	
traditional knowledge	✓	✓			
sustainable use (including levels and effect of trade)	✓	✓		✓	
number, quantity and type of specimens being traded		✓			
source/destination of specimens and permits details		✓			
trade in wetland products				✓	
waterfowl hunting statistics				✓	
<b>GENES</b>					
Genes and genomes					
social, scientific or economic importance	✓				
legislative, administrative and policy measures	✓				
<b>SITES</b>					
Site details					
geographic location	✓	✓		✓	✓
site description	✓			✓	✓
boundaries and map				✓	✓
Ecology of site					
physical features	✓			✓	✓
<i>In situ</i> and management activities					
legislation	✓			✓	✓
conservation measures and management of site	✓			✓	✓
Threats					
threats	✓			✓	✓
Use					
land use	✓			✓	
hydrological values				✓	
social and cultural values	✓			✓	
land tenure/ownership	✓			✓	
economic value	✓			✓	
role of site to local communities	✓			✓	

**Key:**

- #1 fauna and flora listed in the Appendices of CITES
- #2 migratory species listed in Appendices of CMS
- #3 waterfowl and waders and any threatened/notable species of fauna or flora that occur on Ramsar sites
- #4 any threatened/notable species of fauna and flora that occur on World Heritage sites
- #5 protected sites for certain species (eg. Tiger)
- #6 internationally important wetlands
- #7 sites of cultural or natural importance

Sites can be designated using a range of criteria, including the occurrence of notable/threatened species or significant numbers of waterbirds. The most important species related data for Ramsar and World Heritage are range, distribution, population size (including size and trends) and habitat requirements. One of the key links shared by all the conventions relates to the status of species.

Ramsar and World Heritage require very similar information on sites. For example, each site must be described in a certain level of detail, its geographic location must be known, its social and cultural value must be understood, the occurrence of notable and/or threatened fauna and flora known, and threats (current and potential) must be documented. Furthermore, as with species, sites may be listed on both conventions. Much the same information is also required by CBD but in a more general sense – particularly what actions and legislation are in place.

There is no apparent requirement for site-related data for CMS (there is however a requirement for site-related data under a number of the CMS-related Agreements, but these were beyond the scope of this study) and only limited requirement for CITES with regard to particular species. However, the designation of suitable sites based on species criteria could form part of the *in situ* and legislative activities undertaken by Parties as part of their implementation. This implies that certain conservation-related activities, encouraged by the articles of one convention, could be significant for the others.

Information on the threats to species and sites is important. In many cases, the threats may be linked. For example, threat to a species through increased trade activities would raise concerns of the CITES community. Equally, the activities of traders could lead to significant habitat damage, localised pollution and general degradation of a fragile ecosystem present at a nationally/internationally designated site.

Between them, the five biodiversity-related conventions require a broad array of information. Although the requirements of all are different in certain respects, there are data sets that are fundamental to all five conventions. The opportunities to share these at appropriate levels, generating efficiency savings and synergies are worth exploring.

## 2.2 Information from contracting Parties (reporting requirements)

The primary source of information for each secretariat is the convention's contracting Parties. Each convention requires some form of reporting to its CoP (or equivalent) through its secretariat. The timing and frequency of reporting varies from annual to every six years (summarised in Table 2). In addition to periodic reports, Parties provide information on initial accession to certain of the treaties, in submissions for

designation of sites, and in support of amendments to the treaty articles or annexes – especially with regard to listing of species.

With all reporting regimes, careful attention needs to be given to what is to be achieved and how the content of such reports will enable activities to be assessed and priorities for the future determined. Reporting guidelines are an important element of such processes and provide a framework to assist Parties with their submission. In addition, information received in a standard format will be easier to review and will facilitate the production of a report considering the efforts of all contracting Parties.

Guidance is provided to Parties on the form and content of the required information through the convention articles, decisions and resolutions of CoPs and operational guidelines of various kinds. Some of this guidance is very specific and requests quantitative information (e.g. the CITES annual report on trade statistics), or may be specific in terms of structure and general content, as in Ramsar site descriptions. In general, however, guidance to Parties is rather general; specific quantitative indicators or time-series attributes (such as species populations, areas under protection, etc.) are not mandatory, although they may be implied or required for successful implementation.

The fulfilment by contracting Parties of their reporting requirements is variable. For example, Ramsar indicated that they receive a high return of national reports and CITES also indicated that they receive a good number of annual reports. However, CITES has much lower rates of submission for its biennial report (legislative, regulatory and administrative measures to enforce the provisions of the convention) and CMS have encountered non-response rates of as much as 40%. Both the Ramsar national report and CITES annual report have clear guidelines, while the guidelines and conditions for submission of the CITES biennial report are less clear. This suggests that clear guidelines can encourage and contribute to high levels of compliance with regards to reporting. Although the reporting requirements differ between the conventions, as already illustrated, some of the information required is common to all conventions. By harmonising the reporting requirements and timing where possible, and encouraging a standard approach to data collection, the conventions may encourage national level coordination.

National level coordination is needed because information flow is not simply country-to-convention secretariat, but is between responsible national authorities and the convention secretariats. The national authorities for a given Party may be vested in different government departments for each of the treaties. Thus countries may have up to five different lines of communication with the biodiversity treaties. Currently, 37 countries are party to all five biodiversity-related treaties. Further analysis would be required of the national implementing agencies across the 185 countries that are party to one or more of the treaties (see Appendix IV).

**Table 2: Summary of reporting requirements**

Description	Frequency/Timing	Reference <sup>1</sup>
<b>CBD</b>		
Measures countries have taken to implement the provisions of the convention. Timing and content of reports to be decided by CoP.	to be decided by CoP	Article 26
Report on the implementation of Article 6 General Issues. General measures for conservation and sustainable use.	CoP4 (May 1998)	Decision II/17
<b>CITES</b>		
Annual report containing a summary of permits and trade in species included in Appendices I, II and III of the Convention	Annual: by 31 <sup>st</sup> October of the following year	Article VIII and Notif. No. 788
Biennial report on legislative, regulatory and administrative measures taken to enforce the provisions of the Convention	Biennial: no set rule or recommendation about timing, although the first report of a Party is expected to be submitted two years after the entry into force of the Convention and subsequent reports to be submitted every 2 years.	Article VIII
<b>CMS</b>		
Parties to provide the Secretariat with details of the migratory species listed in Appendices I and II the Parties consider themselves to be Range States.	On-going	Article VI
Parties to inform the Secretariat of measures they are taking to conserve migratory species in Appendices I and II.	Each CoP; next CoP in 1999	Article VI
Initial comprehensive report by Parties on accession to the convention	Upon signature	Article VI and Res. 4.1
Updating report by Parties	Each CoP; next CoP in 1999	Article VI and Res 4.1
<b>RAMSAR</b>		
Completed Ramsar datasheet should be submitted to Bureau upon designation of site	Upon designation of each site. Updates every 6 years	Article 2, Rec. 4.7 and Res. 5.3
Change in ecological character of a site Monitoring of sites on Montreux Record	As necessary As necessary	Article 3 Res. 5.4
Report for CoP 7	to Bureau by 1/9/1998; next CoP May. 1999	Notif. 1998/1
<b>WORLD HERITAGE</b>		
Every Party shall submit to the World Heritage Committee an inventory of property forming part of the cultural and natural heritage.	next meeting of the World Heritage Committee, Dec. 1998	Article 11-12 and Operational Guidelines
Parties shall in the reports they submit to the General Conference of UNESCO on dates and in a manner to be determined by it, give information on the legislative and administrative provisions which they have adopted and other action which they have taken for the application of this Convention		Article 29 and Operational Guidelines Currently under review WHC-98/CONF.201/2

<sup>1</sup> Please see Appendix III for details of information requirements

### 2.3 Information from other sources

The convention secretariats also receive information from a range of NGOs and international agencies. In some cases these are specifically designated supporting or advisory bodies, or data managers. In other cases the arrangements are more informal. The information that flows by this means is primarily scientific – for instance in support of taxonomies, reviews of species lists, species population statistics, site descriptions, etc. The flow is directed from these agencies to the separate secretariats, subsidiary bodies, committees and in some cases, direct to the Parties.

### 2.4 Information flow between conventions

All five convention secretariats within the scope of this study meet regularly (hosted by UNEP) to discuss issues of common interest. In addition, officials of secretariats routinely attend each others' CoPs and other major meetings, and exchange principal documents. At present, there is very little flow of scientific information between the conventions, apart from some exchange between Ramsar and WHC regarding sites common to both conventions.

During the *Feasibility Study*, secretariats expressed the need for improved inter-convention exchange, and a number of examples were given of information known to be held by one which would be of value to others and where there would be benefits of sharing scientific expertise. Information flow is hampered by lack of knowledge about the respective data holdings (metadata) of the conventions. An improved understanding of this should lead to a number of benefits.

Bilateral Memoranda of Understanding (MoU) on cooperation exist between the CBD and each of Ramsar, CMS and CITES. There is also a bilateral MoU between Ramsar and CMS. None of these requires or implies information flow.

### 2.5 Information flow from secretariats to Parties

All of the secretariats are charged to provide assessments of the state of implementation of the convention, and to support Parties in implementing the convention. This is achieved in part by synthesising national reports (as undertaken by CITES and Ramsar routinely for each CoP, and by CBD for CoP4). CMS and WHC do not routinely summarise or synthesise national reports for CoPs. However, apart from administrative information, relatively little information flows from the secretariats to Parties.

All of the conventions recognised during the *Feasibility Study* the need to improve feedback of information to Parties, and to find methods to disseminate case studies (successes and failures) and good practices to Parties to support implementation of the provisions of the treaties. See Appendix V for comments from the secretariats on information management issues and needs.



### 3 NEED FOR INFORMATION MANAGEMENT CAPACITY

#### 3.1 Current capacity

Information technology in support of information management in the secretariats is variable. Typically a secretariat has a small number of PCs linked through a LAN, and would use Microsoft Office software - primarily for word processing. All secretariats have web sites, in some cases managed by external agencies.

In the main, the technologies are compatible across the secretariats, with some exceptions. CMS primarily uses Wordperfect (Corel Office Suite 8.0), but have MS-Word available. The use of email is common to all.

CITES possess a quantitative time-series database of species trade statistics, managed by WCMC using Ingres software, and Ramsar have a database of site information mainly in the form of structured narrative, managed by Wetlands International (currently being redesigned and to be implemented using Visual FoxPro).

Analytical capacity (software tools for modelling, time-series, trend analysis, GIS) in the secretariats is almost entirely absent.

The treaties' web sites contain a wealth of information, often in a number of languages, although they vary considerably in approach and information content. For example, CBD's site contains all the CoP papers and has a general search facility. CITES make available a large number of documents, including all the Decisions from the last two CoPs together with an online database (managed by WCMC) providing a range of information on the species listed on the Appendices. CMS provides a wide range of information in English, French and Spanish.

Most of the secretariats have in place an information management strategy or other plan to review or enhance information management. In all cases the availability of resources (especially human) limits the ability to implement these plans. Should the plans progress, consideration should be given to ensuring compatibility of database technology, and analytical tools such as modelling and GIS.

#### 3.2 Common issues and needs

Comments from the secretariats on IT issues and needs are given in Appendix V.

##### *Limited access to existing documents*

It is recognised that reports and submissions from Parties as well as scientific reports and summaries from other sources held by the secretariats represent a potentially valuable information resource. In most cases these documents are neither indexed nor in digital form, and thus are difficult to access by the secretariat or contracting Parties.

##### *Need for case studies and lessons-learned*

All secretariats acknowledged a demand from Parties for information to assist in implementation of treaty provisions - including exemplary strategies and plans, case studies of various aspects of implementation, good practices and so on. With the exception of Ramsar, few of these are currently available through web sites. Also few

national reports or submissions are available in electronic form, so Parties do not have easy access to comparable information from neighbouring or ecologically similar countries

*Need for improved linkages with other conventions*

There is currently little communication between the information technology officers of the secretariats and little exchange of information management strategies, plans, common problems and experiences.

*Limited human resources in IT*

The human resources needed to effectively utilise modern information technology are extremely limited in each of the five secretariats. In addition secretariats need more experience and broader skills to make effective use of existing IT. Information management has not been a priority of CoPs, and the potential benefits of increased investment have not been well explained or understood.

*Difficulty in responding to queries*

Responding to queries from parties, as well as NGOs, press media, prospective Parties, etc. could be streamlined if access to relevant information was more efficient. In some cases, automated processes could provide easy access to information. One reason why this has not happened is that documentation for meetings tends to consume most of the resources available for information analysis and administration.

## 4 OPTIONS FOR HARMONISATION

Options were identified based on common information needs, constraints and functions. Five principal areas were identified:

- Harmonisation in support of the management of information supplied by Parties.
- Harmonisation in support of secretariat 'business'.
- Harmonisation aimed at facilitating Parties in reporting and convention implementation.
- Harmonisation aimed at improving the capacity to assess the effectiveness of treaty implementation
- Process considerations for harmonisation

Outlines of these areas were presented to the secretariats as discussion papers (see Appendix VI).

A summary of the proposed short and medium term actions is given in Appendix VI.

Harmonisation options were refined at a Consultation Workshop (Geneva, 27-28 April 1998) with the five convention secretariats and UNEP. The Workshop was guided by the principles that opportunities selected should:

- Make it easier for Parties to report to and implement the conventions
- Provide for better and more accessible information to obtain a global picture of the effectiveness of the implementation of the conventions
- Increase the efficiency of the secretariats in the execution of their responsibilities
- Be practical to implement given current constraints and technology limitations of secretariats and contracting parties

A summary of the Workshop is included as Appendix VII. The recommendations for implementation are elaborated more fully in the following section.



## 5 IMPLEMENTATION RECOMMENDATIONS

At the Workshop, three streams of action were agreed as feasible and of strategic value in further harmonised information management for the five biodiversity-related conventions. They were:

- Developing a harmonised convention information resource
- Streamlining national reporting to, and implementation of, conventions
- Developing a lessons-learned network

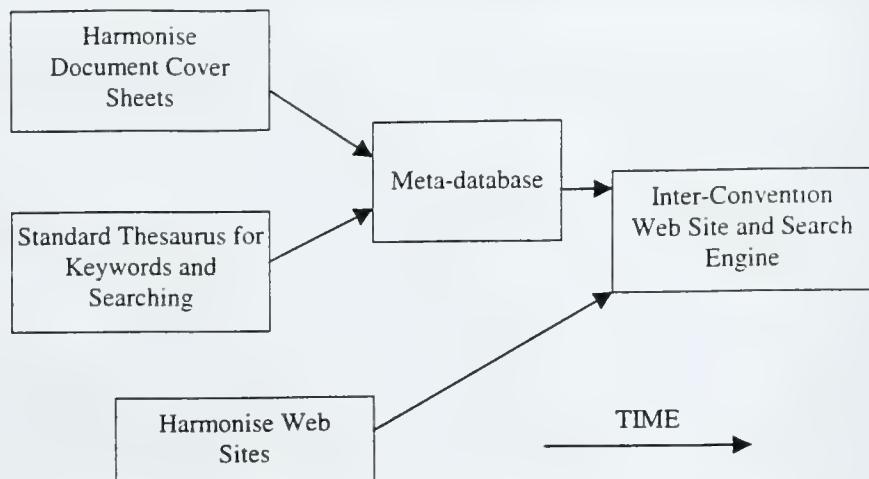
### 5.1 Developing a harmonised convention information resource

The aim is to establish an information resource covering all five biodiversity-related conventions that is accessible to the Parties. It would be based on reports and submissions provided by the Parties, but they would be managed in a structured and harmonised manner to enhance their value. The following benefits are expected:

- Improved access to information contained within national reports and submissions
- Simplification of standard reports such as overview reports on the implementation of each convention
- Improved feedback to parties on implementation
- Opportunities to develop additional reports
- Ability to conduct electronic searches, allowing users to tailor information retrieval to their needs
- Opportunities to archive documents and retain easy access

Synergistic benefits would be expected across the conventions assisted by search facility. This will also increase the operational efficiency of the secretariats.

Five priority areas of activity are needed (Figure 4). Each of these is elaborated below:



**Figure 4. Development of a Harmonised Convention Information Resource**

*i) Harmonise document cover sheets*

The purpose of the cover sheet is to provide standard information for all documents submitted by contracting Parties and generated by the secretariats across all five conventions. It would also serve as the entry for each document into the meta-database (see below).

The recommended minimum content for the cover sheet (Figure 5) is similar to that currently used by some of the conventions. The principal addition is of keywords and a brief summary or abstract (linked to the development of a standard thesaurus for key-wording and searching below). Standards must be adopted for a number of the fields in the cover sheet and these are indicated in italic font in the figure. Wherever possible these should apply ISO or other international standards and deviate as little as practical from existing practice. Consistency in the use items (such as country names) is essential to effective cross-convention searching.

Information applying to all documents:

- Document title
- *Document type*
- *Name of the party*
- Territory to which the convention applies
- *Convention to which the document relates*
- *Date of entry into force of the convention for the party*
- National authority: name (of agency); address (incl. tel. fax, email, web site)
- Designated focal point: (name of contact person); address (incl. tel. fax, email)
- *Content keywords (selected from controlled vocabulary)*
- Abstract: (brief description of contents and purpose of the document)

Reports of parties to the conventions should also add:

- *Period covered by the report*
- Agency responsible for preparing the report
- Name: (of agency)
- Address: (incl. tel. fax, email, web site)
- Designated focal point: (name of contact person); address (incl. tel. fax, email)
- Designated members of standing committees, panels, working groups, etc. (as appropriate to the specific convention)

Papers prepared by Secretariats:

- Standard reference code/number
- Name of body for which paper is prepared
- Language
- Date

**Figure 5. Recommended minimum contents for a harmonised document cover sheet**

*ii) Adopt a standard thesaurus for keywords and searching*

The purpose is to adopt a standard thesaurus so that searching for keywords can be accomplished across the five conventions. It is recommended that the secretariats select a subset of the UNEP-Infoterra multi-lingual vocabulary 'Envoc'. While recognised as incomplete for biodiversity, Envoc is a useful starting point for further development - the UK Clearing House Mechanism, for instance, uses 250 terms from Envoc. Its multi-lingual capability means that keywords selected in one language can be used to search in other languages both as structured keywords and in free text search of abstracts or entire documents.

*iii) Harmonise web sites*

As a means of facilitating use of web sites, it is recommended that, along with convention-specific material, each convention web site has a consistent minimum set of features (Figure 6). Harmonisation should not restrict the creativity or freedom of individual secretariats but recognise the unique aspects of each convention and deliver benefits from the identified minimum common elements.

Main page:

- convention logo
- overview of history and objectives of convention (text)
- basic contact information

Buttons leading to separate pages for:

- *Secretariat* linking to mandate, organisational structure, physical location, names and contact details of staff, supporting organisations - e.g. data management agencies, host organisation
- *Text of treaty*
- *Decisions in force* of Conference of Parties (or equivalent)
- *Parties* linking to status, administrative authorities, focal points with contacts (incl. email and web sites)
- *Reporting requirements* linking to timing, frequency, current reporting guidelines, sample reports
- *Subsidiary bodies/committees* indicating: mandate; meeting frequency; membership policy; list of current members with names and contact information
- *Events schedule*: including forthcoming meetings of CoP, subsidiary bodies and committees, and deadlines for submission of meeting documents etc.
- *Documents*: a list or index of available documents, preferably with hotlinks to download via ftp
- *Frequently Asked Questions* (based on secretariat experience)
- *Hotlinks* to other related sites (with brief description of relationship): other related conventions; regional treaties and organisations; key information sources and databases; key NGOs and international agencies

Target for documents should be:

- all CoP documents (agenda, background papers, proceedings, official country papers)
- all subsidiary body and committee documents (agendas, background papers, minutes, proceedings, official national submissions)
- all national reports and updates
- descriptive summary of all designated sites - e.g. summary portion of national submissions
- all official lists or records - e.g. species lists, range states lists, etc.

**Figure 6. Recommended minimum web site features**

iv) *Develop meta-database*

It is recommended that a meta-database be developed primarily to indicate the information that is available and where it is located. The meta-database should initially be implemented on the web site of each of the five convention secretariats, following standard protocols and software. The meta-database would essentially consist of digital versions of the 'cover sheets' available in a searchable form, with additional information on availability of the full document.

v) *Develop an inter-convention web site and search engine*

The development of an inter-convention web site and search engine is a logical follow-on to harmonised web sites and meta-databases in each of the secretariats. The inter-convention web site would be a single point of entry – in the sense of a gateway, rather than data entry – to the convention web sites, as is currently provided partly by the UNEP-IUC web site. The search engine would enable users

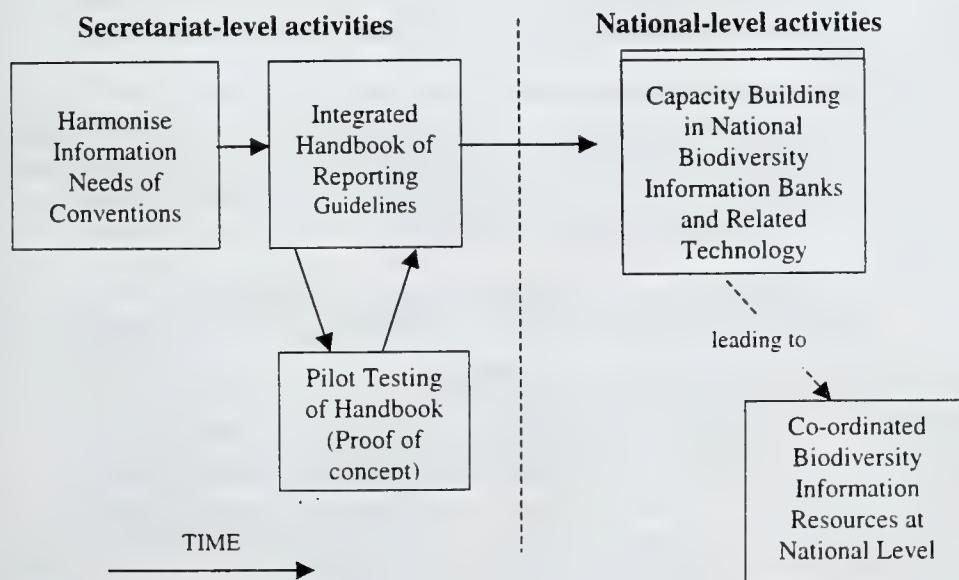
to interrogate and retrieve information from the meta-database covering the five conventions.

### **Process and resources required for implementation of Section 5.1**

- *Total costs were estimated to be in the region of \$50-100K. This includes the design and implementation of the meta-database and harmonised web sites but excludes the highly variable cost of key-wording and entering cover sheets into the meta-database.*
- *Bilateral donors were the most probable source of support. Funding might be secured from the secretariats' host countries especially if the case is made based on synergistic benefits from harmonisation across the five conventions.*

### **5.2 Streamlining national reporting to, and implementation of, conventions**

The eventual purpose is to encourage and assist the development of co-ordinated biodiversity information resources at the national level. There are four necessary steps as shown in Figure 7.



**Figure 7. Streamlined national reporting to facilitate reporting to, and implementation of, conventions**

#### *i) Review and clarify reporting requirements of each convention*

This phase calls for a detailed review of the reporting and submission requirements within each convention. It would build on the analysis of this

*Feasibility Study* and result in well-defined structured 'modules' of information required (the 'information packets' described in Discussion Paper 3, Appendix VI). Clarification is needed of requirements to report on sites that may be common to more than one convention (or governed by common legislation, strategies, action plans), and to report on species populations, threats and habitat loss.

The CBD has yet to define regular reporting needs and, for the foreseeable future, required reports may continue to be thematic – focusing each time on different articles or aspects. Ways in which the needs of CBD can be met, at least in part, by defining and selecting appropriate modules from the other conventions should be examined in this phase.

*ii) Prepare an integrated handbook of national reporting*

The integrated handbook follows from the previous review and structuring of information reporting requirements. Guidelines for each convention would be assembled into a consolidated handbook (both hard-copy and electronic) with a common glossary and terminology set. The handbook would need to be updated to reflect changes in reporting requirements.

The handbook should particularly suggest how contracting Parties could most usefully organise national information systems and collection regimes to facilitate preparing reporting modules to the conventions while contributing to their own national policies, strategies and action plans.

*iii) Pilot testing of handbook (proof-of-concept)*

The handbook would be tested in approximately 10 countries. This would involve review by the implementing agencies for each of the conventions and an assessment by the agencies of the changes they would need to introduce at national level to implement integrated reporting.

Criteria for selecting participating countries could include:

- Convention membership
- Regional distribution
- Social, economic and cultural balance
- Size – include small island developing states (especially because their size and resources may imply a closer relationships between responsible national agencies than may occur in larger countries)
- Past involvement with related activities such as the UNEP/GEF *BDM Project* that may already have provided the basis for further capacity building.

The results of this pilot would be used to improve and refine the handbook, as well as defining the capacity building requirements at national level for full implementation of integrated reporting.

iv) *Capacity building in national biodiversity information banks and related technology*

Building capacity at national level to implement the integrated reporting guidelines would directly address the goal of developing co-ordinated national biodiversity information resources. The envisaged national biodiversity information banks would serve the needs of the national biodiversity strategies and action plans, and would also help nations to report to the conventions. A related goal for the development of 'virtual reporting' was regarded by the secretariats as unrealistic within the foreseeable future. However, the development of national biodiversity information banks could, in the long-term, facilitate virtual reporting.

A number of phases would occur such as selection of exemplary countries (similar to the proof-of-concept countries), the assessment of capacity building needs, pilot testing of implementation. Other elements would include institutional strengthening and development of a framework for biodiversity information which could be replicated and implemented in many countries.

***Process and resources required for implementation of Section 5.2***

- *For the review of information requirements both internal and external (cross-convention harmonisation) resources will be required. Estimate \$5,000-30,000 per secretariat. This will be highly variable, as some conventions already have very well-defined reporting guidelines (such as CITES trade statistics, and Ramsar data sheets), whereas others need to consider more structure and specification in light of secretariat needs. Funding sources could include bilaterals from host countries, and/or multi-laterals with emphasis on assisting Parties - easing the burden of multiple reporting.*
- *GEF PDF B funding was proposed for the development and proof-of-concept testing of the integrated reporting handbook - \$250,000 estimated.*
- *Later stages of capacity building and pilot country-driven implementation would require \$2-5m. GEF would seem the most likely source. Final costing will depend on the outcome of the pilot projects.*

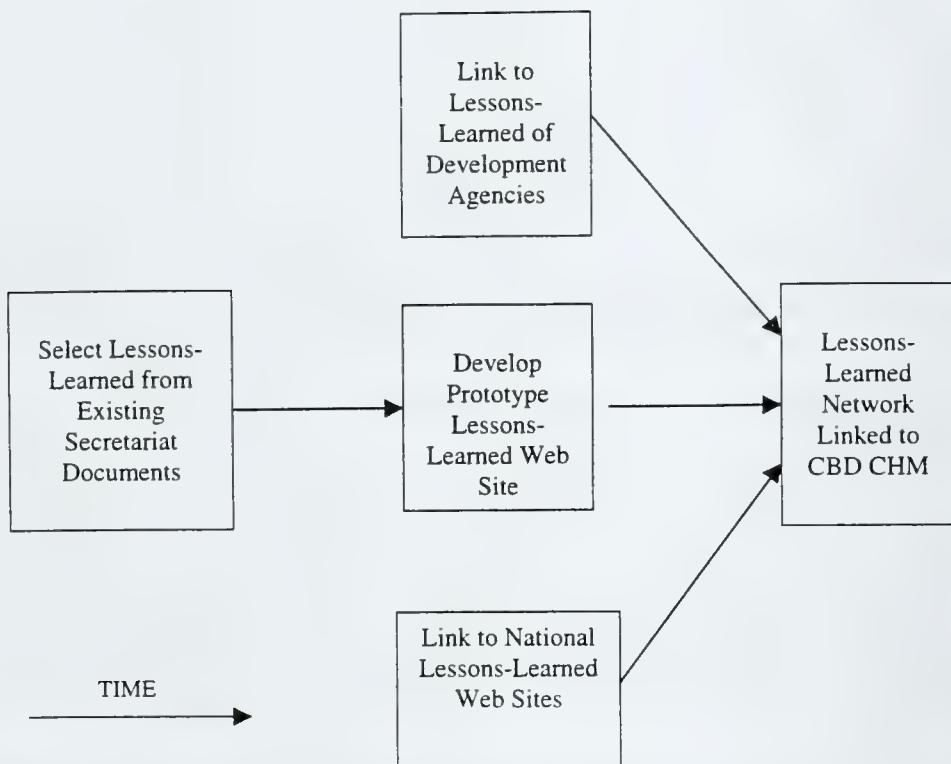
**5.3 Developing a lessons-learned network**

The objective is to encourage the sharing of experience from beneficial case studies whether positive success stories or examples of what to avoid. It could, for instance, include examples spanning field projects in species re-introduction, experience on invasive species, habitat rehabilitation through to policies and guidelines for sustainable use. There are five main activities, as noted in Figure 8.

i) *Select lessons-learned from existing secretariat documents*

This requires an internal review in each secretariat to select appropriate material from project files and national reports. These would be posted on a special section of the convention web site. (Ramsar has already done this.) It

would be useful to consider a more specialised key-wording vocabulary for these lessons learned – for instance, incorporating a standard taxonomy and more detailed terms related to habitat rehabilitation, management plans, threat mitigation and other specific items.



**Figure 8. Stages in development of the lessons-learned network**

*ii) Develop prototype lessons-learned web site*

This could be developed as a separate web site or as part of the inter-convention web site and would serve to test the methodology and delivery of information, and to attract input from other agencies.

*iii) Establish links to lessons-learned of development agencies, and national lessons-learned web sites.*

The most valuable lessons-learned will be from national activities. It may take time for these lessons-learned case studies to appear on national sites. Until this happens, a set of themes could be drawn up (eg. for Best Practice Guidelines for CITES implementation for new parties and others) and efforts would be made to collect relevant material from the Parties in the short term. From the experience of Ramsar, once a prototype site is established, national and international agencies are willing to submit additional material and/or

provide links to existing sites with case studies and examples of good practice. Guidelines must be developed for acceptance of lessons-learned or links.

iv) *Link lessons-learned network to CBD-CHM.*

This is the fully operational stage. It follows the testing of the prototype and adjustment according to experience. The ultimate goal is that the lessons-learned network becomes a useful node in the overall CBD Clearing House Mechanism.

***Process and resources required for implementation of Section 5.3***

- *The Workshop suggested bilateral donors with secretariats best placed to make the case to their host countries based on synergistic benefits.*
- *Total cost to develop the prototype lessons-learned web site was estimated in region of \$50,000-100,000.*
- *No estimate of ongoing running costs has been made, but these are envisaged as low.*



## **6 OVERALL PROCESS ISSUES**

Achieving harmonisation of information management through the proposed projects will require active collaboration between the five participating conventions. To help achieve this, three processes were identified:

- high level harmonisation steering committee
- joint scientific panel
- joint information technology working group

It was acknowledged that there was a need for closer collaboration between the information management and technology staff of the secretariats. The CMS Secretariat offered to convene and host a first meeting of such a group, to begin to discuss the issue of harmonisation of web sites, document cover sheets and the standard thesaurus.

Collaboration on scientific issues, including species lists and vocabulary was seen as more difficult. The possibility was raised of having a single joint scientific panel, but there were believed to be too few issues in common for this to be worthwhile across all five treaties. The existing well-defined CITES standard taxonomies were identified as a useful base that could be expanded to include standardised species lists for Ramsar and CMS. It was recognised that coordination between the chairs of the CMS Scientific Council and the CITES Nomenclature Committee would be beneficial.

Actions and decisions requiring coordination were identified as follows:

- adoption of standards (including document types, country names, dates)
- selection/adoption of high-level keyword vocabulary
- minimum content of harmonised web sites
- coordination on meta-database design
- input to design of central web site and search engine
- collaboration in the identification of information packets
- design of integrated handbook
- harmonisation of terminology
- selection of proof-of-concept countries
- species lists and taxonomies
- lower-level key-wording vocabulary for lessons-learned

There was concern that the current meeting workload of the secretariats was already very high. Apart from the considerations above, no firm commitment was made to form additional working groups or committees at this time. WCMC was asked to continue to develop ideas and proposals in support of the secretariats.



## 7 CONCLUSIONS

The *Feasibility Study* succeeded in identifying specific areas for harmonisation between the five conventions.

There are significant areas where the five conventions need information on the same sectors of biodiversity and there are practical steps that can be taken towards harmonising information management. Most notable areas of commonality are the species information data required by CITES and CMS, and the site-based information needed by Ramsar and WHC. There is considerable scope within these to harmonise information management and the information requirements from national reports to improve efficiency and gain greater benefits from efforts at all levels.

Information flow could be managed and directed to greater effect. This is especially the case from the secretariats to the Parties where information disseminated is currently largely administrative but could be extended to include more scientific and analytical information or more sharing of experience. Information flow and co-ordination are impeded by the multiple channels that reflect the diversity of agencies charged with implementation at national level. Greater coordination at national level would be beneficial.

The five secretariats share challenges relating to IT and information management. Their responses to these challenges would benefit from improved communication and sharing of experience.

Of the range of options proposed by WCMC some such as virtual reporting were seen as impractical at least in the short-medium term and so are excluded from the recommended immediate actions. Options of this type are worthy for reconsideration once the more immediate steps have been taken.

Feasible steps agreed by the secretariats as both pragmatic and of strategic value to improve harmonisation are to:

- develop a harmonised conventions information resource
- streamline reporting to conventions
- develop a lesson-learned network

These steps will now be taken forward through the development of funding proposals by WCMC, at the request of, and in close consultation with, the convention secretariats.

During implementation of the *Feasibility Study*, there was considerable interest from other treaties notably the FCCC and CCD. A broader study embracing these and other treaties would be beneficial and timely.



## APPENDIX I – TERMS OF REFERENCE

### PROPOSAL

#### Summary

#### Scope

This proposal is for a feasibility study for the first phase of a harmonised information management infrastructure for biodiversity-related treaties, namely:

Convention on Biological Diversity (CBD)

Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

Convention on the Conservation of Migratory Species of Wild Animals (CMS)

Convention on Wetlands of International Importance, especially as Waterfowl Habitat (Ramsar)

World Heritage Convention (WHC)

This Study is an essential prerequisite for country-focused capacity building and development of harmonised reporting and information management activities. However, country-level activities are beyond the scope of the current proposal.

The Study will examine the needs and the current situation in the above treaties, and provide costed options for developing and implementing a harmonised approach to information management.

#### Products of the Study

The final Feasibility Study Report will contain the following:

##### *Information Flow Analysis:*

the ways in which the treaties need to link and share information with each other; the common linkages with external international and national agencies, and the relationship between reporting schedules.

##### *Assessment of Information Needs:*

information needs for each treaty secretariat, as well as an overview analysis of commonalities.

##### *Assessment of the Needs for Information Management Capacity:*

processing and analysis needs for each treaty secretariat, and an overview of commonalities.

##### *Opportunity Evaluation:*

- potential advantages of harmonisation
- current strengths which can be utilised
- the most likely areas of gain for both the treaties and their contracting parties.

*Implementation Alternatives:*

costed alternatives for a harmonised infrastructure with a range of options from common principles and exchange formats, through harmonised hardware/software and common data elements, information management, common (or at least interlinked) information services, to full integration. The selected alternative can then be followed up by a programme of helping countries to work more efficiently and effectively with the treaties.

## BACKGROUND

### Rationale

The majority of nations have now confirmed their commitment to the principles of Agenda 21 by becoming Parties to the *Convention on Biological Diversity*, to other treaties related to biodiversity conservation, to treaties such as the *United Nations Convention to Combat Desertification in those countries experiencing serious drought and/or desertification, particularly in Africa*, and to others directed at stabilisation of the global environment, such as the *Framework Convention on Climate Change* (FCCC) and the *Montreal Protocol*. Nations recognise their wider regional and global responsibilities, as well as the need to manage their own environment sustainably. Biological diversity, in particular, has become a concern of central significance as a measure of the sustainability of development patterns.

In addition to the defined reporting requirements of global and regional treaties, nations now realise that strategy development and wise decision-making on the sustainable use of biological resources and the equitable sharing of benefits depends on having systematically organised **information**. The information which nations must organise and manage, in order to respond to specific and implied requirements of these treaties, is complex and transcends conventional sectoral divisions.

The development of such enabling capabilities is taxing to all nations, but particularly strains the capacity of developing countries. It is important, therefore, that national information management infrastructure be developed as efficiently as possible - to serve both national strategic and operational needs, as well as the reporting obligations to all the relevant treaties. There is a growing demand for the ability to **combine and integrate** biodiversity-related data and to share the benefits of advanced technology deriving from a wide variety of publicly-funded biodiversity initiatives. One result is that countries are seeking better access to technology and data from others (through, for example, the CBD Clearing-house Mechanism), and are also seeking feedback from treaty secretariats of comparative data from other parties. These will contribute to early warning of regional problems, clarify priorities and monitor progress towards objectives.

The secretariats of the biodiversity-related treaties have an obligation to be as efficient and responsive as possible in managing their information - much of which will be provided by reports from parties - in such a way that facilitates national information management. It is also desirable that information handling be compatible with the approaches of the various associated agencies, such as UNEP, UNDP, World Bank and GEF. Increasingly, there is a call from parties for secretariats to collaborate more closely, to gain synergies and to avoid duplication. For example, Decision III/21 of the CBD Conference of Parties

*Requests the Executive Secretary to continue to coordinate with the secretariats of relevant biodiversity-related conventions, institutions, and processes, with a view to: facilitating exchange of information and experience; exploring the possibility of recommending procedures for harmonising, to the extent desirable and practicable, the reporting requirements of Parties under those instruments and conventions; exploring the possibility of coordinating their respective programmes of work; and consulting on how such conventions and other international legal instruments can contribute to the implementation of the provisions of the Convention on Biological Diversity;*

Towards this end memoranda of cooperation have been entered into between the CBD and each of CITES, the CMS and the Ramsar Convention.

In essence, there are two primary needs to be addressed:

- for countries to be enabled to provide information to the secretariats effectively and efficiently, and to facilitate the development of harmonised national information management infrastructure
- for secretariats to be as efficient as possible in the management and sharing of information, and in responding to needs of the parties and prospective parties.

The time is opportune for consideration of harmonised information management amongst the treaties - to capitalise on current interest and momentum, and rapidly evolving technology, before incompatible parallel developments create expensive barriers to future integration.

## **Benefits**

### *To the Conventions:*

- improved ability to achieve treaty objectives through process improvement
- improved efficiency (reduced cost) of information management, including ability to respond to queries
- reduced cost of information technology implementation
- jointly improved analysis capacity and ability to coordinate programmes of work, through sharing of information and experience
- improved information quality, consistency and transparency
- improved linkages with international environmental monitoring agencies, major data custodians, and regional treaties
- improved image and attractiveness to prospective parties.

*To the parties:*

- reduced cost of meeting reporting requirements of treaties, through co-ordinated schedules and standards
- improved information feedback from secretariats and comparability with other countries
- increased ability to develop and use clearing house mechanisms and integrated indicators of sustainability
- improved access to best practices in information management, including standards, data quality assurance and effective use of technology.

In subsequent phases, parties could be assisted to:

- improve efficiency and effectiveness through building national biodiversity information systems which will support national strategy and policy development, and consequent implementation
- improve ability to implement country-driven actions in support of treaty commitments, such as conservation and sustainable use.

### **Elements of the feasibility study**

The feasibility study is composed of four basic elements: an assessment of the **needs**, an assessment of the **current strengths and capacities**, an **analysis of findings**, and the development of **options**. Each of these elements is described below:

#### **Needs Assessment**

This will comprise an evaluation of the treaty documents and formal decisions and recommendations of the bodies responsible for treaty implementation, e.g. Conferences of the Parties. It will determine:

##### a) What **data and information** are needed

- by the treaty parties to:
- manage, monitor and improve treaty implementation.
- by the treaty secretariats to:
- support parties and subsidiary and other advisory bodies
- respond to queries from parties, international agencies, NGOs, and the media
- manage the data resulting from national reporting
- conduct forward planning
- from the treaty secretariats by national governments to:
- effectively implement the treaty
- understand their obligations

- improve their current level of compliance
- share experience and make appropriate comparisons to other countries
- meet reporting requirements efficiently.

b) What **linkages** are needed between the treaties and with other international organisations, NGOs, networks and "clearing houses" (e.g. IUCN's Environmental Law Centre, WCMC, etc.), in order to share information and most efficiently implement the treaties.

c) Which **activities** are currently duplicated at secretariat or contracting party level, and which are carried out for one treaty that would directly support the work of others.

d) What **information analysis capabilities** are needed, that is, the capacity to process and analyze data, such as statistical analysis, scientific analysis and modelling, GIS, time series and trend analysis, forecasting and so on. Of particular interest would be needs of this nature which are common amongst the treaties.

### **Assessment of Current Secretariat Capacities**

This element examines and documents the current situation in the secretariats with respect to the same four aspects as the **Needs Assessment**, namely current data and information and its use, the nature and extent of linkages and agreements, current activities and resources and tools available for managing and analyzing information.

### **Analysis of Findings**

The analysis of findings will assemble a view of the current and potential information flow within and between the treaties, and present an opportunity evaluation derived from common needs and existing strengths. Consideration will be given to:

- the extent to which there are information management and analysis needs in common
- opportunities for improvements through synchronisation of reporting schedules
- potential benefits of adopting common standards (including definitions of terms, processes and data items)
- opportunities for common or shared software and database structures
- how current strengths can best be utilised
- how any gaps or deficiencies can be identified and rectified
- what level of harmonisation would be most beneficial for treaty support services
- what are likely future needs and trends for which there should be preparation
- benefits and limitations of a harmonised approach, from the over-riding perspective of improving the effectiveness of treaty implementation.

With regard to linkages the analysis will consider, for example, what activities are currently duplicated at secretariat or contracting party level, and which activities carried out for one treaty would support the work of another.

### **Development of Options**

This element will develop a number of alternative practical plans for implementation at different levels of integration and harmonisation, including implementing common standards, common or inter-linked information services, harmonised World Wide Web sites on the Internet, etc. The alternatives will be developed from the perspective of opportunity evaluation - to maximize the benefits of existing strengths and expertise, and tools. Each of the alternatives will be fully described and evaluated according to:

- benefits and limitations
- one-time and on-going costs
- training and human development implications.

An implementation plan and schedule for each option will be prepared.

### **Approach**

The principles of the approach are to be iterative and consultative. The study will encourage the secretariats to review their obligations, objectives and requirements for data and information, and to link the study to existing standing committee or expert committee processes. A stepwise approach is proposed involving workshops and flexible opportunities for consultation and refinement of ideas.

The planned steps are as follows:

#### **1. Documentation Review**

For each of the designated treaties, review treaty articles and all formal decisions or recommendations in order to identify any data and information resources required to support their implementation. Review current and proposed reporting requirements on parties to those treaties. Identify current data and information management procedures and documentation. Review information-related aspects of Memoranda of Understanding and other collaborative agreements. Identify any information resources that would be of potential value to more than one treaty. Build an information base that would underpin subsequent steps, paying particular attention to those information resources that support actions identified by the treaty parties as being of high priority.

#### **2. Survey of Needs**

Consultation with secretariats leading to a focussed workshop. This would be used to raise awareness and understanding of the issues amongst the key actors. The objective of this step would be to derive a preliminary overview data model, identifying commonalities and differences, and a plan for the information gathering approach for a more detailed needs study. The data model and plan will be made available for review and comment.

### **3. Detailed Needs Study**

Consultations to follow-up the preliminary findings and the workshops, including visits to individual secretariats. The focus will be to extend the findings and, in particular, to identify common information and data analysis needs.

### **4. Development of Alternatives**

Elaborate a range of alternatives with different levels of harmonisation and integration, in consultation with the secretariats and other actors. It should be noted that benefits are perceived even if harmonisation among the treaties proceeds in a partial or stepwise fashion. For each feasible alternative a costed implementation plan will be developed, with consideration of the principles of improving the effectiveness of treaty implementation, efficiency of secretariat services, and minimising the burden on reporting parties.

### **5. Costing of Alternatives**

Cost estimates will consider the **practical** implementation considerations of options, as well as how to take advantage of existing infrastructure and expertise. Cost estimates will include human resources, training, hardware, software, and on-going operations.

### **6. Consultation and Feedback**

Drafts of alternative implementation plans will be provided to all participants in the study for review.

### **7. Feasibility Study Report**

The Feasibility Study Report will integrate all comments and feedback. The Report will be presented at a further meeting of secretariats for agreement on next steps.



## APPENDIX II – PROJECT METHODOLOGY

Preliminary discussions with executives of the treaty secretariats quickly revealed that a routine, information technology data model approach to the *Feasibility Study* was inappropriate. Instead it was important to identify areas of potential opportunity for harmonisation, directed at a long-term vision of cooperative and harmonised treaties which benefited both the secretariats in conducting their business, and the contracting parties in implementing the provisions of the treaties. The study team was invited to be radical and visionary; to stimulate progress with a broad range of options.

The study, therefore, adopted an opportunity analysis approach, rather than systematically reviewing computer systems and data items for overlap and commonalities. In the opportunity analysis approach a number of long term visions are suggested and, within each, a range of possible beneficial harmonisation actions are identified - and subsequently discussed, refined, and prioritised to a shortlist of feasible actions. These highest priority most-likely-to-succeed actions were then costed. The principal stages in the study were:

- 1) Review of the information needs of the conventions as indicated or implied by the articles of the treaties and subsequent formal decisions of the parties.
- 2) Review of the information needs of the conventions as identified in directives and guidelines for national reports and submissions.
- 3) On-site consultations and structured interviews with key secretariat officials of each of the conventions.

Information sought during these consultations included:

- reporting required from Parties
- management and maintenance of information submitted to the secretariats
- managing information on the administration of the conventions
- standards and guidelines used
- management of responses (information dissemination)
- linkages and interactions between the conventions
- future directions and plans in information management and technology
- views on harmonisation opportunities

- 4) Synthesis of preliminary findings on commonalities of constraints, information requirements and information management functions.

This synthesis was circulated to the secretariats in December 1997 as a discussion document entitled "Towards the harmonisation of Information Management of the Biodiversity Treaties - Discussion Points for a Workshop".

5) Consultation on opportunity areas

The original intent was to discuss and refine the opportunities at a Workshop in Geneva scheduled for 5/6 February 1998. This Workshop was postponed and the consultation was performed through the circulation of five discussion papers. Four discussion papers elaborated the four opportunities. A fifth discussion paper addressed potential process considerations, that is, the committees, working groups and other joint arrangements needed to move forward with harmonisation.

The discussion papers were distributed February 1998.

6) Workshop on harmonisation actions

The initial harmonisation opportunities were refined based on feedback from the Secretariats. A Framework for Action was developed as a basis of discussion at a consultative Workshop, 27/28 April 1998. The Workshop resulted in agreement on multi-step projects towards harmonisation with indicative costs and possible funding sources.

7) Final report

The results of the Workshop and the previous steps of the Study were complied into the Feasibility Study Report.

### **APPENDIX III – INFORMATION NEEDS OF THE CONVENTIONS**

## Convention on Biological Diversity

Article	Summary	Key Information
Article 1	Objective of the convention	
Article 2	Use of terms	
Article 3	Principle	
Article 4	Jurisdictional scope	
Article 5	Parties should cooperate with each other	
Article 6	General Issues: Develop strategies to support CBD issues and integrate these into relevant policies etc	
Article 7	Identification and monitoring, in relation to Articles 8-10. Identify, monitor and document biodiversity and threats	
Article 8	In situ conservation - each Party shall, as far as possible and as appropriate:	<ul style="list-style-type: none"> <li>▪ establish protected area system</li> <li>▪ develop guidelines for development of protected areas system</li> <li>▪ manage biodiversity within and outside protected areas system</li> <li>▪ promote ecosystem protection</li> <li>▪ manage areas adjacent to protected areas</li> <li>▪ rehabilitate degraded systems</li> <li>▪ regulate genetically modified organisms</li> <li>▪ control alien species</li> <li>▪ balance biodiversity conservation and sustainable use and demands</li> <li>▪ involve and promote traditional lifestyles relevant to conservation and sustainable utilisation of biological diversity</li> <li>▪ develop or maintain relevant legislation</li> <li>▪ manage adverse processes</li> <li>▪ provide financial support to developing countries</li> </ul>
Article 9	Ex situ conservation - each Party shall, as far as possible and appropriate:	<ul style="list-style-type: none"> <li>▪ adopt measures for ex situ conservation</li> <li>▪ establish and maintain facilities and research on biodiversity</li> <li>▪ implement recovery and rehabilitation measures</li> <li>▪ regulate collections for ex situ conservation to minimise impact on ecosystems and in situ populations</li> <li>▪ provide financial support to developing countries</li> </ul>

**Summary**

Article	Key Information
Article 10	<p><b>Sustainable use of components of biological diversity -</b> each Party shall, as far as possible and appropriate:</p> <ul style="list-style-type: none"> <li>integrate concept into national decision making</li> <li>minimize adverse impact on biodiversity</li> <li>promote customary use</li> <li>restore degraded areas</li> <li>encourage government department/private sector co-operation</li> <li>Incentive measures: provide incentives to conserve and sustainably use biodiversity via economically and socially sound measures</li> </ul>
Article 11	<p><b>Research and training</b></p> <ul style="list-style-type: none"> <li>implement scientific and technical education and training programmes</li> <li>promote research which contributes to the conservation and sustainable use of biological diversity</li> <li>cooperate in developing conservation and sustainable use techniques, in keeping with Articles 16, 18 and 20</li> </ul>
Article 12	<p><b>Public education and awareness - promote understanding of the importance of conservation of biological diversity</b></p> <p>Impact assessment and minimising adverse impacts - introduction of environmental impact assessment, liaise with other States over activities which carry a negative impact on biodiversity and promote emergency response measures.</p>
Article 13	<p><b>Article 14</b></p> <p>Facilitate access to generic resources and participate in research in participation with Party providing the resource</p>
Article 15	<p>Provide access to and transfer of, technologies relevant to conservation and sustainable use of biological diversity, or that use genetic resources.</p>
Article 16	<p>Facilitate information exchange relevant to conservation and sustainable use of biological diversity, including data repatriation.</p>
Article 17	<p>Promote international technical and scientific co-operation, including development and implementation of national policies.</p>
Article 18	<p>Parties should undertake appropriate biotechnology research activities, and ensure developing countries have access to technologies based on genetic resources that they have supplied.</p>
Article 19	<p>Protocols should be developed to handle any genetically.</p>
Article 20	<p>Parties should provide financial resources to achieve Convention objectives.</p>
Article 21	<p>Financial mechanism for the provision of financial resources to developing countries.</p>
Article 22	<p>Relationship with other international conventions</p>
Article 23	<p>Conference of the Parties</p>
Article 24	<p>Secretariat</p>
Article 25	<p>Subsidiary Body on Scientific, Technical and Technological Advice</p>
Article 26	<p>National reporting requirements. Reports to COP to be made on measures countries have taken to implement provisions of CBD (timing and content of reports to be decided by CoP)</p>
Article 27-42	<p>measures countries have taken to implement provisions of CBD</p> <p>Settlement of disputes, adoption of protocols, amendments and final provisions</p>

Article	Summary	Key Information
Decision II/8	Parties should identify priority issues specifically related to components of biodiversity at threat, as part of first national report	<ul style="list-style-type: none"> <li>Priority issues related to components of biological diversity under threat, based upon paragraphs 1, 2, 4, and 5 of SBSTAA recommendation II/3</li> </ul>
Decision II/10	Encourages parties to undertake and exchange information on demonstration projects as practical examples of integrated marine and coastal area management.	<ul style="list-style-type: none"> <li>details of national strategies, plans and programmes for the conservation &amp; sustainable use of biological diversity</li> </ul>
Decision II/17	First national report due at COP4, to focus on implementation of Article 6. General measures for conservation and sustainable use plus information in national country studies. Reports will not be distributed as official documents of COP.	<ul style="list-style-type: none"> <li>details of financial support from parties for the Convention objectives</li> </ul>
Decision III/6	Countries should provide standard information on their financial support for the objectives of the CBD, preferably including this in national reports to the Secretariat of the CBD.	<ul style="list-style-type: none"> <li>indicators of biological diversity</li> </ul>
Decision III/9	Encourages setting of measurable targets and requests action for habitat restoration. Urges identification of indicators and implementation of Article 7, with a step by step approach, as a priority, beginning with rapid implementation of Article 7a and 7c. Need for pilot projects to demonstrate assessment and indicator methodologies.	<ul style="list-style-type: none"> <li>identification of biodiversity of importance for conservation or sustainable use</li> <li>identification of processes having adverse impact</li> </ul>
Decision III/10	Recommend exploration of ways of making taxonomic information housed in collections readily available, particularly to countries of origin	<ul style="list-style-type: none"> <li>inventory of collections that exist, with summary of collection contents</li> <li>knowledge of existing mechanisms for managing this information, and providing access to it</li> </ul>
Decision III/11	Requests identification of ongoing relevant activities and issues and priorities that need to be addressed at national level and report back to COPs, particularly in relation to indicative list provided in Annex 2 to this decision.	<ul style="list-style-type: none"> <li>knowledge of which countries the collections originate from</li> <li>issues and priorities needing addressing at national level</li> </ul>
Decision III/14	Requests development of national legislation and corresponding strategies to implement 8j, and to supply information on this in national reports. Governments to submit case studies on measures taken to develop and implement the CBD's provisions relating to indigenous and local communities	<ul style="list-style-type: none"> <li>national legislation and administrative and incentive measures</li> <li>case studies relating to indigenous and local communities</li> </ul>
Decision III/15	Urges governments to send information relating to Article 15, access to genetic resources; on legislation, and policy, national participation processes research programmes. Urges governments to promote the successful development and implementation of legislative, administrative and policy measures and guidelines on access, including scientific, technical, business, legal and management skills and capacities. Encourages governments to identify and communicate to the Secretariat competent national authorities responsible for granting access to generic resources.	<ul style="list-style-type: none"> <li>legislative, administrative and policy measures and guidelines for activities covered by Article 15, particularly access and benefit sharing</li> <li>information on access measures</li> <li>details of national authorities responsible for controlling access rights to genetic resources</li> </ul>
Decision III/17	Governments to conduct and communicate case studies of the impacts of intellectual property rights on the achievement of CBD objectives to secretariat through clearing house mechanism	<ul style="list-style-type: none"> <li>case studies on the impacts of intellectual property rights on the achievement of CBD objectives</li> </ul>
Decision III/18	Encourages review of legislation and economic policies, and incorporation of market and non-market values of biodiversity into appropriate plans etc. Invites sharing experiences, and making case studies available to secretariat.	<ul style="list-style-type: none"> <li>existing legislation and economic policy</li> <li>case studies on incentive measures</li> </ul>
Decision III/21	Urges parties to ensure conservation of wetlands, migratory species and their habitats are incorporated into national strategies to preserve biological diversity	<ul style="list-style-type: none"> <li>information on wetlands</li> <li>migratory species and their habitat requirements</li> </ul>

## Convention on International Trade in Endangered Species of Wild Fauna and Flora

Article	Summary	Key Information
Article 1	Definitions	status of species effect of trade on species conservation status
Article 2	• Appendix I shall include all species threatened with extinction which are or may be affected by trade • Appendix II shall include all species which may become threatened with extinction unless trade is regulated • Appendix III shall include species which any Party identifies as being subject to trade regulations within its jurisdiction (or the purpose of preventing or restricting exploitation of trade in specimens of species included in Appendix I).	status of species effect of trade on status of species source of specimens shipping arrangements/practices export permit import permit purpose of trade effect of trade on status of species source of specimens shipping arrangements/practices levels of trade population levels export permit source of specimens shipping arrangements/practices export permit
Article 3	Regulation of trade in specimens of species included in Appendix II.	source of specimens name and address of exporters and importers number and type of permits granted States with which trade occurred names of species traded number, quantity and types of specimens legislation
Article 4	Regulation of trade in specimens of species included in Appendix III.	source of specimens name and address of exporters and importers number and type of permits granted States with which trade occurred names of species traded number, quantity and types of specimens legislation
Article 5	Regulation of trade in specimens of species included in Appendix I.	source of specimens name and address of exporters and importers number and type of permits granted States with which trade occurred names of species traded number, quantity and types of specimens legislation
Article 6	Permits and certificates.	source of specimens
Article 7	Exemptions and other special provisions relating to trade	source of specimens
Article 8	Measure to be taken by Parties:	source of specimens
	• take appropriate measures to enforce provisions of convention (trade regulations) • adopt appropriate procedures following confiscation of live specimens • shall maintain records of trade in species included in the appendices • annual report containing a summary of permits and trade • a biennial report on legislative, regulatory and administrative measures taken to enforce the provisions of the Convention	source of specimens
Article 9	Management and Scientific Authorities	source of specimens
Article 10	Trade with states not Party to the convention	source of specimens
Article 11	Conference of the Parties	source of specimens
Article 12	The Secretariat	source of specimens
Article 13	International measures	source of specimens

Article	Summary	Key Information
Article 14	Effect on domestic legislation and international conventions	
Article 15	Amendments to Appendices I and II	
Article 16	Appendix III, and amendments to	
Article 17	Amendment of the convention	
Article 18-25	Resolution of disputes, signature, ratification, accession, entry into force, reservations etc.	
Notif. No.788	Guidelines for the Preparation and Submission of CITES Annual Reports. Provides details of required format and lists of controlled terms	<ul style="list-style-type: none"> <li>Species number and type of permits and certificates issued</li> <li>country of export/origin/destination</li> <li>number/quantity and types of specimens</li> <li>size and sex of specimens</li> <li>source of specimens</li> <li>purpose</li> </ul>
Resolution Conf. 9.4	Submission of annual report	<ul style="list-style-type: none"> <li>Permits</li> <li>origin of specimens</li> <li>identification</li> </ul>
Resolution Conf. 9.5	Trade with States not Party to the convention	<ul style="list-style-type: none"> <li>certification to the effect that the competent scientific institution has advised that the export will not be detrimental to the survival of the species</li> <li>ultimate destination of the shipment</li> <li>detailed information on significant cases of illegal trade</li> <li>details of convicted illegal traders and persistent offenders</li> <li>information on seizures and confiscations</li> <li>illegal trade in whale meat</li> <li>geographic origin of such meat</li> <li>distribution of tigers</li> <li>legislation</li> </ul>
Resolution Conf. 9.7	Transit and transhipment	<ul style="list-style-type: none"> <li>protected habitats with common boundaries</li> <li>law enforcement needs associated with transborder movement of tiger parts and derivatives</li> </ul>
Resolution Conf. 9.8	Measures to strengthen the enforcement of the convention	<ul style="list-style-type: none"> <li>indigenous knowledge and traditional wisdom on the ecological importance of the tiger, its prey and its habitat</li> <li>stocks of rhinoceros horn</li> <li>legislation</li> </ul>
Resolution Conf. 9.10	Disposal of illegally traded, confiscated and accumulated specimens.	
Resolution Conf. 9.12	Illegal trade in whale meat. Cooperation with IWC.	
Resolution Conf. 9.13	Conservation of and trade in Tigers.	
Resolution Conf. 9.14	Conservation of Rhinoceros in Asia and Africa	
Resolution Conf. 9.17	Status of international trade in shark species	<ul style="list-style-type: none"> <li>standardised indicators of success to measure changes in levels of illegal hunting and of the status of rhinoceros populations in the range States</li> <li>trade levels</li> <li>distribution of rhinos</li> <li>population counts</li> <li>trade activities</li> <li>biological status of sharks, including historical catch and trade data on shark</li> </ul>

**Key information**

Article	Summary	Key information
Resolution Conf. 9.18	Regulation of trade in plants	<ul style="list-style-type: none"> <li>fisheries</li> <li>materials and expertise enabling identification of plant specimens in trade</li> <li>annual reports, plant health documents, nursery catalogues and other sources of information to detect possible illegal trade</li> <li>contact details for botanic gardens, tourist organisations and relevant non-governmental organisations</li> <li>details of commercial nurseries</li> </ul>
Resolution Conf. 9.19	Guidelines for the registration of nurseries exporting artificially propagated specimens of Appendix I species.	<ul style="list-style-type: none"> <li>biology, management and geographic extent of each population that will be affected throughout its range</li> <li>population distribution (current and historical), status and trends, annual reproduction rate and mortality</li> <li>national management plan for marine turtles (including monitoring, harvesting regulation, habitat protection)</li> <li>regional management (management of the population should involve the range States sharing the majority of the population)</li> <li>details of ranching operations</li> <li>nesting beaches (including extent of and changes to)</li> <li>proposals for setting of quotas</li> </ul>
Resolution Conf. 9.20	Guidelines for evaluating marine turtle ranching proposals submitted pursuant to Resolution Conf. 10.18	<ul style="list-style-type: none"> <li>tag to include: country of origin; a unique serial identification number, a standard species code</li> <li>population size</li> <li>area of occupancy</li> <li>population status and trends</li> <li>taxonomy</li> <li>habitat availability</li> <li>role in ecosystem</li> <li>threats</li> <li>legal and illegal trade</li> <li>legal status (national and international)</li> </ul>
Resolution Conf. 9.21	The interpretation and application of quotas for species included in Appendix I.	
Resolution Conf. 9.22	Universal tagging system for the identification of crocodilian skins.	
Resolution Conf. 9.24	Criteria for amendment of Appendices I and II (cf. IUCN Red List categories, 1994). Format for proposal is given as an annex	<ul style="list-style-type: none"> <li>species (including taxonomy)</li> <li>purpose of the transaction using standard terms</li> <li>indicate the source of the specimens using standard terms</li> <li>country of origin</li> <li>details of exporter and importer</li> <li>quantity and units</li> </ul>
Resolution Conf. 10.2	Permits and certificates - standardisation and acceptance	Information that should be included.
Resolution Conf. 10.3	Designation and role of the Scientific Authorities	
Resolution Conf. 10.4	Co-operation and synergy with the Convention on Biological Diversity	
Resolution Conf. 10.7	Disposal of confiscated live specimens of species included in the appendices. Includes a Decision Tree to assist with the selection of appropriate action	<ul style="list-style-type: none"> <li>details of suitable rescue centres</li> </ul>

Article	Summary	Key information
Resolution Conf.10.8	Conservation of and trade in bears	illegal trade illegal markets population numbers and trends conservation and management of these populations threats status controls on trade (including anti-poaching measures) legislation and effectiveness details of all importers, manufacturers, wholesalers and retailers dealing in raw, semi-worked or worked ivory product current levels and trends of illegal hunting and trade in ivory reasons for trend quotas inventory of ivory stocks law enforcement data on seizures and confiscations (BIIDS) population data/trends incidence and patterns of illegal hunting measures of the effort and resources employed in detection and prevention of illegal hunting and trade breeding and nesting areas hunting, trapping and egg collection activities legislation quotas trade list of key International Organisations to verify scientific tree data ranching proposal (including how contributes to conservation of species on App I) standard taxonomic references inventory of frozen whale parts and derivatives (species, quantity and geographic origin) demand for bear parts and derivatives conservation measures taken to conserve rhino populations identification material for shark species figures for landings and by-catch of sharks information on life history, growth rate, life span, sexual maturity distribution of sharks by age and sex and seasonal movements information on nurseries involved in the export of CITES listed plants list of agreed scientific and vernacular names potential impact of invasive species
Resolution Conf.10.9	Consideration of proposals for the transfer of African Elephant populations from Appendix I to Appendix II	Trade in Elephant specimens. Includes details of information to be entered into a refined version of TRAIFC's Bad Ivory Database System (BIIDS)
Resolution Conf.10.10		
Resolution Conf.10.11	Conservation of the Houbara Bustard	
Resolution Conf.10.12	Conservation of Sturgeons	
Resolution Conf.10.13	Implementation of the Convention for timber species.	
Resolution Conf.10.18	Ranching and trade in ranched specimens.	
Resolution Conf.10.22	Standard nomenclature	
Decision 10.40	Regarding co-operation in monitoring illegal trade in whale parts and derivatives	
Decision 10.44	Regarding trade in bears	
Decision 10.45	Regarding the conservation of Rhinoceroses	
Decision 10.48	Regarding the biological and trade status of sharks	
Decision 10.50	Regarding trade in plants	
Decision 10.52	Regarding the identification of timber	
Decision 10.54	Regarding trade in alien species	

# Convention on the Conservation of Migratory Species of Wild Animals

Article	Summary	Key Information
Article I	Interpretation and definition of terms used. Of particular note are "conservation status" and "endangered".	
Article II	Fundamental principles: <ul style="list-style-type: none"><li>promote, co-operate and support research</li><li>provide protection for Appendix I species</li><li>conclude Agreements covering the conservation and management of Appendix II species</li></ul>	
Article III	Endangered Migratory Species: Appendix I. How species can be listed or removed from <ul style="list-style-type: none"><li>Appendix I Range state Parties shall endeavour to:<ul style="list-style-type: none"><li>conserve and restore habitats</li><li>prevent, remove, etc obstacles that seriously impede the migration of species</li><li>prevent, reduce or control factors contributing to species being endangered, esp. controlling exotic species</li><li>prohibit taking of species</li></ul></li><li>Migratory Species to be the subject of agreements: Appendix II. Migratory species which have an unfavourable conservation status and which require international agreements for their conservation and management. Range state Parties should endeavour to conclude Agreements where these should benefit the species.</li></ul>	<ul style="list-style-type: none"><li>indication of whether species endangered</li><li>migration routes</li><li>threats</li><li>exotic species</li><li>time series population data</li><li>current and historic range of species</li><li>habitat requirements</li><li>global and national conservation status (see IUCN 1994 Red List categories for further details)</li></ul>
Article IV	Guidelines for Agreements. Object of each Agreement is to restore the species concerned to a favourable conservation status or to maintain it in such a status. Each Agreement should provide for (as a minimum): <ul style="list-style-type: none"><li>periodic review of conservation status</li><li>co-ordinated conservation and management plans</li><li>research into ecology and population dynamics</li><li>conservation and restoration of suitable habitats</li><li>elimination of obstacles to migration</li><li>control of release of harmful substances</li><li>develop measures to control and manage the taking of species</li><li>provide procedures for co-ordinating action to suppress illegal taking</li><li>exchange information on threats</li><li>emergency procedures</li><li>raise public awareness</li></ul>	<ul style="list-style-type: none"><li>range states of species</li><li>migration routes</li><li>habitat requirements</li><li>threats</li></ul>
Article V	Range States: maintenance of a list of range states for species on the appendices and reporting requirements of range state Parties: <ul style="list-style-type: none"><li>list of range states of species in Appendix I and II to be maintained by the Secretariat using information from Parties</li><li>Parties to inform Secretariat which Appendix I and II species they are a range state for</li><li>Parties to inform COP through the Secretariat on measures they are taking to implement the provisions of the convention for these species (see Resolution 4.1)</li></ul>	<ul style="list-style-type: none"><li>range states of species</li><li>action being taken by the Party to conserve species (in particular see action required under Articles III and IV); <i>Resolution 4.1, Party Reports</i>, provides an outline of the content of an initial comprehensive report (annex A) and for updating reports (annex B)</li></ul>
Article VI		

Article	Summary	Key information
Article VII	The Conference of the Parties, its role duties and obligations. Each COP shall review the implementation of the convention	<ul style="list-style-type: none"> <li>information to complete formal review of selected Appendix I species (see <i>Resolution 3.2</i> for details)</li> </ul>
Article VIII	Role of the Scientific Council	<ul style="list-style-type: none"> <li>Range states of all species on Appendix I and II</li> </ul>
Article IX	Role of the Secretariat	<ul style="list-style-type: none"> <li>see Resolution 1.5</li> </ul>
Article X	Amendment of the Convention	<ul style="list-style-type: none"> <li>list of Appendix II species in Range State current conservation status and measures</li> </ul>
Article XI	Amendment of the Appendices	<ul style="list-style-type: none"> <li>taxonomy of species</li> </ul>
Article XII	Effect on International Conventions and Other Legislation	<ul style="list-style-type: none"> <li>biological data (distribution, population estimates, habitat, migrations)</li> </ul>
Recommendation 5.1	Agreement on the Conservation of African Eurasian Migratory Waterbirds (AEWA). Parties should support implementation of Action plans	<ul style="list-style-type: none"> <li>threat data (direct, habitat destruction, indirect, national and international utilisation)</li> </ul>
Recommendation 5.2	Co-operative Action for Appendix II species. Recommends Parties to undertake co-operative action to improve conservation status of Appendix II species	<ul style="list-style-type: none"> <li>protection status and needs (national protection status, international protection status, additional protection needs)</li> </ul>
Resolution 1.5	Proposed format for inclusion of individual species in Appendices I or II.	<ul style="list-style-type: none"> <li>range states</li> <li>comments from range states</li> <li>references</li> <li>lists of species in appendices</li> <li>proposals for inclusion of species on appendices</li> </ul>
Resolution 3.1	Requests parties to consider listing species in both appendices. Range state Parties of App II species should initiate agreements with other range states. Submit proposals in line with Art 11, and to aid developing countries and under-represented countries in preparing proposals.	<ul style="list-style-type: none"> <li>taxonomy and common names</li> <li>biological data (distribution, habitat, population estimates and trends, migratory patterns)</li> <li>conservation status, by Party</li> <li>actual and potential threats (habitat degradation/loss, exploitation, other threats)</li> </ul>
Resolution 3.2	Appendix I species review process: Parties are urged to provide information needed for review reports	<ul style="list-style-type: none"> <li>legislation, national and international</li> <li>conservation measures, by Party (prohibition of taking, conservation/restoration of habitat, mitigation of impediments to migration, regulation of other detrimental factors, further measures)</li> <li>research activities (governmental and non governmental)</li> <li>needs and recommended actions (legislative, conservation measures, research and monitoring)</li> </ul>
Resolution 3.3	Refers specifically to small cetaceans - over taken by ASCOBANS	<ul style="list-style-type: none"> <li>See ASCOBANS</li> </ul>

**Key information**

Article	Summary	Key information
Resolution 4.1	Party reports - outline for initial comprehensive report by Parties on accession to the convention (annex A) and outline for updating reports by Parties to each meeting of the Conference of the Parties	<ul style="list-style-type: none"> <li>legislation through which the convention is implemented</li> <li>species for which is a range state</li> <li>population size and trends for Appendix I spp. and where relevant historic data</li> <li>indication of whether species endangered</li> <li>migration routes</li> <li>threats</li> <li>exotic species</li> <li>national legislation for prohibition of taking</li> <li>Agreements</li> <li>details of national activities: surveys, monitoring, research</li> </ul>
Resolution 5.3	Definition of term "endangered" - facing a very high risk of extinction in the wild in the near future. In assessing the endangered status for the purposes of listing in Appendix I, Parties should be guided by IUCN Red List Categories (1994)	
Resolution 5.4	Parties are requested to actively pursue priorities laid down in the Annex to this resolution pending a comprehensive review 'Strategy for the Future Development of the Convention' at COP 6.	<ul style="list-style-type: none"> <li>enhance membership in CMS through targeted promotion of the convention's aims</li> <li>intensify conservation initiatives in regions under represented in CMS</li> <li>facilitate and improve implementation of the convention</li> <li>develop agreements according to regional priorities</li> <li>prioritise conservation actions for migratory species</li> <li>mobility financial resources for conservation initiatives</li> <li>rationalise institutional arrangements</li> <li>strengthen institutional linkages</li> </ul>
Resolution 5.5	Consolidation of Secretariats for Convention and Individual Agreements	

## CMS:ASCOBANS (Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas)

Article	Summary	Key Information
Article 1	Scope and Interpretation of terms used. All cetaceans within agreement area	list of relevant species occurring in area
Article 2	Purpose and basic arrangements - Parties undertake to cooperate closely in order to achieve and maintain favourable conservation status for small cetaceans. Report to be submitted each year covering progress made and difficulties encountered during the past calendar year in implementing the agreement	progress made in implementing the convention difficulties experienced
Article 3	The Co-ordinating Authority, monitoring Party activities and acting as a contact point for convention	annual Party reports
Article 4	The Secretariat; responsibilities of the Secretariat. Each year prepare a summary of the Party reports and an account of its own activities	legal and financial procedures
Article 5	The Advisory Committee	threatening substances, preventing their release by-catch data
Articles 6-8	Meeting of the Parties; financing; legal matters and formalities - procedures pertaining to these areas.	effects of current fishing practice and fishing gear activities which affect food resources and how to reduce their impact sources of disturbance, esp. acoustic status and seasonal movement of populations and stocks threats
Annex	Conservation, research and management measures to be applied, in conjunction with other competent international bodies, to the populations defined in Article 1.1:	abundance, trends, population structure and dynamics and migrations habitat requirements, feeding ecology, trophic relationships, dispersal, sensory biology, disturbance and interactions with fisheries causes of death of stranded individuals (into database) food composition data derived from stranded specimens (into database) effect of pollutants on cetacean health
Advisory Committee Meeting (30/6-27/7/97)	ACM 30/6-27/97: Resolution on management and further research needs to address effects of pollutants on cetacean health; requesting Advisory Committee and Parties to consider facilitating research on relation between the harbour porpoise and pollution	fisheries data to enable the Advisory Committee to make estimates of annual by-catch rates
COP 2 Annex K	Resolution on incidental take of small cetaceans; agreeing conservation specific objectives and approaches	estimates of total harbour porpoise by-catch in Skagerrak/Kattegat/Baltic Sea methods to reduce catch evaluation of catches and their ecological implications with regard to input from fishery industry
COP 2 Annex L	Further research needs of pollutants on cetacean health. Parties should consider ways to facilitate development of programme on cause-effect relationships in co-operation with IWC and other bodies	data on cause-effect relationships

Article	Summary	Key Information
COP 2 Annex M	Invites Parties and non-Party Range States to: continue or initiate research into identifying protected areas, post-mortem examinations; reducing disturbance; monitoring, status and population studies.	<ul style="list-style-type: none"> <li>▪ important locations</li> <li>▪ disturbance</li> <li>▪ status</li> <li>▪ population counts</li> <li>▪ important locations</li> <li>▪ causes of disturbance</li> <li>▪ population counts</li> <li>▪ biological and habitat data</li> </ul>
COP 2 Annex N	Further implementation. Continue/initiate research identifying further suitable areas and appropriate management actions to ensure species protection. Support schemes on post-mortem analysis. Introduce guidelines/measures to reduce disturbance to species. Encourage further research on biological factors and population.	

## CMS: EUROBATS (Agreement on the Conservation of Bats in Europe)

Article	Summary	Key information
Article 1	Scope and interpretation of terms used. European populations of Chiroptera occurring in Europe and non-European range states	
Article 2	General provisions: definition of the Agreement	
Article 3	Fundamental obligations of the Agreement. Each Party shall: <ul style="list-style-type: none"> <li>prohibit deliberate capture, keeping or killing of bats except under permit</li> <li>identify sites important for bat conservation</li> <li>identify and protect important feeding areas for bats from damage or disturbance</li> <li>consider habitat requirements of bats when planning habitat conservation</li> <li>promote the conservation of bats and public awareness</li> <li>assign an appropriate body responsibilities for the provision of advice on bat conservation and management</li> <li>take necessary action to safeguard bat populations under threat</li> <li>promote research</li> <li>consider the effect of pesticides when assessing pesticides for use</li> <li>endeavour to replace timber treatment chemicals which are highly toxic to bats with safer alternatives</li> </ul>	<ul style="list-style-type: none"> <li>sites important for bats</li> <li>important bat feeding areas</li> <li>threats to sites of importance</li> <li>habitat requirements</li> <li>conservation and management of bats</li> <li>status of populations</li> <li>threats to populations</li> <li>effects of pesticides on bats</li> </ul>
Article 4	National implementation: legislative and administrative measures.	
Article 5	Meetings of Parties: procedural information on when they will occur, voting rights and establishment of working groups.	
Article 6	Up-to-date reports on implementation of the agreement by each Party.	
Article 7	Amendment of the Agreement: amendment procedure.	
Article 8-14	Covering reservations; settlement of disputes; signature/ratification/acceptance/approval, accession, entry into force, denunciation/termination and depository.	
Adv.Com Meeting 2 (para 24)	Preparation of reports; party reports should be circulated amongst peers for review.	
Adv.Com Meeting 2 (para 25-26)	Submission/revision of reports	

# RAMSAR

Article	Summary	Key information
Article 1	Interpretation of terms used - what constitutes a "wetland" and what are "waterfowl"	<ul style="list-style-type: none"> <li>list of important wetlands</li> <li>description of sites</li> <li>boundaries of wetlands</li> <li>maps of wetlands</li> </ul>
Article 2	Calls for designation of suitable wetlands, the boundaries of which should be precisely described and defined on a map. Guidelines on selection of sites.	<ul style="list-style-type: none"> <li>international significance of site in terms of ecology, botany, zoology, limnology, hydrology, species, esp. waterfowl</li> <li>knowledge of international obligations relating to wetlands</li> </ul>
Article 3	Parties shall formulate and implement planning for the conservation and wise use of listed wetlands and other wetlands in their territory. Each Party shall make arrangements to be informed of any change (past, present or predicted) due to human interference.	<ul style="list-style-type: none"> <li>planning obligations</li> <li>threats to wetlands (technological developments, pollution, human, other interference)</li> <li>nature reserves on wetlands</li> <li>habitat of wetland</li> <li>data on loss of wetlands</li> <li>research data on wetlands including population data, and management measures</li> </ul>
Article 4	Each Party shall establish wardened nature reserves on wetlands whether they are included on the list or not for the promotion of nature conservation	<ul style="list-style-type: none"> <li>compensate for any loss of habitat for those wetlands included on the list, by creating additional wetlands and habitats in the same area or elsewhere.</li> <li>encourage research and exchange of wetland data</li> <li>endeavour to increase waterfowl populations through management measures</li> <li>promote appropriate training of personnel</li> </ul>
Article 5	Parties shall consult with each other with regard to transboundary wetlands and endeavour to coordinate on areas of policy and regulation.	<ul style="list-style-type: none"> <li>shared wetlands - transboundary water systems (to indicate where shared)</li> <li>list and details of wetlands</li> <li>information on conservation, management and use of wetlands and their flora and fauna</li> </ul>
Article 6	Establishment and role of Conference of the Contracting Parties - to review and promote the implementation of the convention. Parties shall ensure that those responsible for wetlands management shall be informed of, and take into consideration, recommendations of COPs.	<ul style="list-style-type: none"> <li>Obligations of contracting parties at COPs.</li> <li>Representation of parties at COPs and voting arrangements.</li> <li>Assignment of bureau duties and description of those duties.</li> <li>Procedural information on the signature, ratification and accession to the convention.</li> <li>Date of convention coming into force for contracting parties.</li> <li>Procedures for amendment of the convention by contracting parties.</li> <li>Length of time that a party is committed to the convention and procedures of withdrawal.</li> <li>Duties of the Depository</li> </ul>
Article 7	Interested Parties should prepare inventories of wetlands and their resources as an aid to the formulation and implementation of national wetland policies	<ul style="list-style-type: none"> <li>inventories of wetlands and biological resources</li> </ul>
Article 8		
Article 9		
Article 10		
Article 10 bis		
Article 11		
Article 12		
Recommendation 15		

Article	Summary	Key information
Recommendation 2.3	Action points for priority attention. Comprehensive national wetlands policies based on 5 approaches: scientific; policy and law; management, education and public awareness; and special site measures	<ul style="list-style-type: none"> <li>• National data collection, research and monitoring</li> </ul>
Recommendation 3.2	Recommend urgent research be undertaken to investigate recent declines in numbers of waders, and that waterfowl hunting statistics be collected, to allow better management of flyway populations.	<ul style="list-style-type: none"> <li>• research data on population numbers of waders</li> <li>• waterfowl hunting statistics</li> </ul>
Recommendation 3.3	Parties should give particular attention to wise use of wetlands by promotion of policies that contain: national inventory; identification of benefits and value; definition of site priorities; environmental impact assessment; ethical development funds; regulated use of wild fauna & flora	<ul style="list-style-type: none"> <li>• flyway populations</li> <li>• current wetland policy</li> <li>• current use of wetland sites</li> </ul>
Recommendation 3.9	Urge all parties to take swift & effective action to prevent further degradation of sites and to restore, as far as possible, the value of damaged sites	<ul style="list-style-type: none"> <li>• current policy/legislation available for conservation of wetlands; or others</li> <li>• procedures available to prevent degradation</li> <li>• threats to sites</li> <li>• restoration projects</li> </ul>
Recommendation 4.1	All parties examine the possibility of establishing wetland restoration projects; the country agencies responsible for wetlands should have 'wetland restoration' in their mission; and should seek out restoration opportunities.	<ul style="list-style-type: none"> <li>• representative or unique nature of wetland</li> <li>• plants and animals using the wetland, and their status</li> <li>• importance of wetland to species</li> </ul>
Recommendation 4.2	Criteria for identifying wetlands of international importance. An annex gives details of the criteria.	<ul style="list-style-type: none"> <li>• waterfowl counts</li> <li>• national inventories of wetlands</li> <li>• value of wetlands</li> <li>• current education programmes</li> <li>• current legal mechanisms</li> </ul>
Recommendation 4.4	Parties should establish national networks of nature reserves covering listed and non-listed wetlands	<ul style="list-style-type: none"> <li>• establish conservation education programmes linked to these networks</li> <li>• compile national inventories detailing the location and value of wetlands</li> <li>• review legal mechanisms for establishment and protection of nature reserves</li> </ul>
Recommendation 4.5	Education should be placed as a high priority; educational programme should be provided at key reserves; establish special educational reserves, provide adequate training courses at all levels in-country	<ul style="list-style-type: none"> <li>• current educational programmes</li> <li>• national curricula activities</li> </ul>
Recommendation 4.6	Parties should establish national scientific inventories of wetlands showing those which are of international importance.	<ul style="list-style-type: none"> <li>• inventory of wetlands</li> <li>• reasons for importance (in an international context)</li> </ul>
Recommendation 4.7	Mechanisms for improved application of the Convention. In particular, recommends the development of data sheets for Ramsar sites, details of which are given in an Annex (which has been subsequently revised)	<ul style="list-style-type: none"> <li>• country</li> <li>• name</li> <li>• geographic location (including coordinates)</li> <li>• altitude</li> <li>• area</li> <li>• description</li> <li>• wetland type</li> <li>• Ramsar criteria</li> <li>• map</li> </ul>

### Key information

<p>hydrological values (groundwater recharge, flood control, sediment trapping, shoreline stabilisation, etc.)</p> <p>ecological features (main habitats and vegetation types)</p> <p>noteworthy fauna (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.)</p> <p>noteworthy flora (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important, include count data, etc.)</p> <p>social and cultural values (e.g., fisheries production, forestry, religious importance, archaeological site, etc.)</p>	<p>land tenure/ownership of: (a) site (b) surrounding area</p>	<p>current land use: (a) site (b) surroundings/catchment</p>	<p>factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects, (a) at the site (b) around the site</p>	<p>conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)</p>	<p>conservation measures proposed but not yet implemented/current scientific research and facilities</p>	<p>current conservation education: (e.g., visitors centre, hides, information booklet, facilities for school visits, etc.)</p>	<p>current recreation and tourism use of wetlands and frequency/intensity jurisdiction: (territorial, e.g., state/region and functional, e.g., Dept. of Agriculture/Dept. of Environment etc.)</p>	<p>management authority: (contact details of local body responsible for site)</p>	<p>bibliographical references</p>	<p>threats to wetlands</p>	<p>legislation/policy available to prevent survey work</p>	<p>wader/fowl population data</p>	<p>flyways</p>	<p>protection measures available</p>	<p>management measures</p>	<p>role of wetlands</p>	<p>endangered species using wetlands</p>	<p>knowledge of relevant NGOs and areas of collaboration/support</p>
<p><b>Recommendation 4.8</b></p>	<p>Parties should take swift action to absolve threats to wetlands ecological character.</p>																	
<p><b>Recommendation 4.12</b></p>	<p>Parties should participate in internationally co-ordinated waterfowl surveys, and undertake surveys of their territory. Urges contracting parties situated along the same flyway to cooperate with regard to financial assistance and expertise sharing.</p>																	
<p><b>Recommendation 5.3</b></p>	<p>Calls for establishment of strict protection measures for Ramsar sites and wetland reserves of small size or particular sensitivity. Emphasises the need to develop zoning measures related to larger Ramsar sites.</p>																	
<p><b>Recommendation 5.4</b></p>	<p>Calls for parties to pay special attention to major role of wetlands as habitats for a wide range of endangered species (cf. Convention on Biological Diversity)</p>																	
<p><b>Recommendation 5.6</b></p>	<p>Recommends that contracting parties support the development and functioning of national and international Wetland NGOs. Encourages parties to consult NGOs, provide them with relevant information and offer opportunities for policy contribution</p>																	

Article	Summary	Key information
Recommendation 5.8	Parties should develop public awareness of wetland values at reserves in their own territory. Special efforts should be made in this regard to co-ordinate internationally on raising public awareness.	<ul style="list-style-type: none"> <li>value of wetlands, esp. in relation to raising public awareness</li> </ul>
Recommendation 5.9	Parties should supply experts for co-operation with the Convention Bureau and others on formulating proposals on criteria to be used when identifying wetlands of international importance esp. for fishery interests, and to develop guidelines on application of criteria.	<ul style="list-style-type: none"> <li>list of experts</li> </ul>
Recommendation 5.10	Parties in co-operation with partners and other NGOs, initiate development of public awareness programmes on values and functions of wetlands	<ul style="list-style-type: none"> <li>value of wetlands</li> <li>function of wetlands</li> </ul>
Recommendation 5.11	Parties are urged to act in pursuance of the objectives of Agenda 21 and other relevant international agreements; CITES and CBD - regarding trade in wetland products and wise use of wetlands in the Neotropical Region	<ul style="list-style-type: none"> <li>knowledge of relevant biodiversity related conventions having influence on wetlands or wetland species</li> <li>trade in wetland products</li> </ul>
Recommendation 6.1	Parties should maintain or give priority to the inventory and evaluation of peatlands in their territories, nominate additional peatland ecosystems as Ramsar sites (Rcs. 5.6 Section II.1)	<ul style="list-style-type: none"> <li>inventory of all peatlands in territory</li> </ul>
Recommendation 6.2	Parties should integrate clearly environmental considerations into planning decisions. Parties, national and international organisations are invited to submit to the Bureau guidelines on environmental appraisal and EIA relevant to wetlands as an aid to 'wise-use'.	<ul style="list-style-type: none"> <li>information on environmental appraisal methods and guidelines</li> </ul>
Recommendation 6.3	Parties should: make special efforts to encourage participation of local and indigenous peoples at wetland sites; recognise value of local and traditional knowledge management; consider representation from peoples in national policies and programs	<ul style="list-style-type: none"> <li>information on use of wetlands by local people (traditional use), and possible mechanisms for their involvement in policies and programmes</li> </ul>
Recommendation 6.7	Urges parties to designate areas of coral reefs and associated ecosystems for inclusion on Ramsar	<ul style="list-style-type: none"> <li>biological data on coral reef habitats and importance</li> </ul>
Recommendation 6.8	Calls for parties to: adopt and apply strategic planning and integrated coastal zone management principles to assist decision-making on the conservation and wise use of coastal wetlands and components; ensure strategic planning and EIAs are carried out in a timely fashion to meet the objectives of wise management	<ul style="list-style-type: none"> <li>planning and management of coastal zone</li> <li>'wise use' policies applicable to the coastal zone</li> </ul>
Recommendation 6.9	Calls on parties to provide summary information and copies of relevant National Wetland Policy to the Bureau, for preparation of a Framework Document on development and implementation of National Wetland Policies.	<ul style="list-style-type: none"> <li>copies of National Wetland Policy</li> </ul>
Recommendation 6.10	Invites support from parties on initiative to 'promote co-operation on the economic valuation of wetlands.'	<ul style="list-style-type: none"> <li>economic value of wetlands</li> </ul>
Recommendation 6.12	Parties should reinforce or start processes for consultation and knowledge dissemination between public and private sectors and NGOs, to promote and enhance wetland conservation and wise use in relation to private or public funded activities that may negatively affect wetlands.	<ul style="list-style-type: none"> <li>current management of wetlands, and needs for further development and implementation</li> </ul>
Recommendation 6.13	Parties are called upon to prepare and implement more management plans for wetlands.	<ul style="list-style-type: none"> <li>effect of toxic chemicals on wetlands</li> <li>efforts to remedy or prevent wetland pollution</li> </ul>
Recommendation 6.14	Calls on parties to recognise the adverse impact of toxic chemicals on wetlands, and that this is not compatible with the 'wise use' concept. Parties should provide information in their National Reports on their efforts to remedy and to prevent pollution impacts.	<ul style="list-style-type: none"> <li>existing national policies</li> </ul>
Recommendation 6.15	Restoration of Wetlands; Parties should: see restoration as a high priority; integrate restoration of wetlands into existing national policies; take steps to restore key sites; include section on	<ul style="list-style-type: none"> <li>list of national sites in need of restoration</li> </ul>

**Key information****Summary****Article**

Resolution 4.4	restoration in National Reports for 7 <sup>th</sup> meeting. Cf Article 5. Recommends that parties provide the Bureau with all relevant information on wetlands and water systems to enable obligations to be fully met.	restoration activities information on wetlands information on water systems in territory.
Resolution 4.5	At least one wetland must be added to list when a country signs the Convention	information on wetlands
Resolution 5.3	Procedure for initial designation of sites for Ramsar list. New sites should fulfil criteria of Rec. 4.2. Completed Ramsar datasheet should be submitted to Bureau upon designation of site.	regional inventories of wetlands list of designated sites datasheets on sites (see Rec. 4.7) boundary maps
Resolution 5.4	Guidelines for operating the Montreux Record of listed sites - where change in ecological character had occurred, was occurring, or was likely to occur (see also Annex to Resolution VU1 Montreux Record - Questionnaire).	Completed RIS and map should be submitted to Ramsar Bureau ecological character of listed sites possible effect of technological development, pollution or other human interference
Resolution 5.6	Cf. Art 3.1 and Rec. 4.10. Contracting Parties should implement the guidelines on wise use of wetlands in a more systematic and effective manner.	wise use guidelines and their current implementation internationally, nationally and locally management plans
Resolution 5.7	Contracting parties should develop management plans for each wetland designated on Ramsar list. Plans should be sent to the Bureau (esp. those relating to Montreux Record). Parties establish legal and administrative structures for management plans and provide funds for implementation of the plans. Parties should apply guidelines (Annex to Res. 5.7), and consider using them to review and update existing management plans.	legal and administrative mechanisms management plan, including description, evaluation and objectives (i.e., what to do) and action plan/prescriptions (i.e., how to do it)
Resolution 5.8	Submission of applications for funding should be complete by June first each year. Parties need to provide prompt reports on the execution of approved projects for documentation of use of funds.	Ramsar Criteria (see Rec. 4.2)
Resolution 5.9	Parties should use the concept and examples provided in IUCN's presentation at COP 4 as a basis for application of Section 2 of the Ramsar Criteria (for identifying wetlands of international importance). Parties should use figures submitted to COP 4 by Wetlands International as a basis for application on Section 3 (esp. (c)) of the criteria, and supply them with figures and facts at regular intervals.	Figures on animal and plant population levels at sites
Resolution VU1	Calls on Parties to support development of early warning systems for detecting, and initiating action in response to change in ecological character (Annex 1 to resolution VI1 describes the working definitions).	ecological character of sites factors causing change in ecological character
Resolution VU2	Adoption of criteria based on fish for identifying Ramsar sites (and Annex 1 to resolution VI1 describes the guidelines for their application)	fish species at wetlands
Resolution VU4	Adoption of population estimates for operation of specific criteria based on waterfowl (see also Resolution 5.9). Calls on parties to use the waterfowl estimates and thresholds developed by Wetlands International as a basis for designation of Ramsar sites in the next 3 triennial.	waterfowl populations
Resolution VU5	Inclusion of subterranean Karst and cave wetland systems. Parties should assess the significance of and consider designating sites in these categories as Ramsar sites.	biological data on subterranean Karst and cave wetland systems
Resolution VU9	Parties are encouraged to actively contribute to the goals of the Convention on Biological Diversity, by ensuring the wetland biodiversity components are included into plans, programmes or strategies and projects at the national level	goals of the CBD and areas of overlap with the Ramsar Convention

Article	Summary	Key information
Resolution VII/10	Cooperation with the GEF and its implementing agencies; World Bank, UNDP and UNEP. Parties are invited at the national level to co-ordinate their approaches to Ramsar and GEF National Wetland Inventories and candidate sites for listing. Encourages parties to include all wetlands on national scientific inventories. Urges parties to recognise fully its identified sites meeting criteria approved by COP	<ul style="list-style-type: none"> <li>knowledge of GEF; World Bank/UNDP/UNEP activities and areas of cooperation/co-ordination</li> <li>wetland ecosystems and how relate to Ramsar criteria</li> </ul>
Resolution VII/12	Submission of information on sites designated for the Ramsar list of wetlands of International Importance. Provide Ramsar Bureau with maps and completed information sheets on all designated Ramsar sites within their territories and keep under revision (every 6 years). Furthermore, requests that Wetlands International develop further its analysis of threats to sites included in the Ramsar List, in particular with a view to presenting a summary of the frequency and distribution of different categories of threat affecting the sites, and drawing conclusions on the success or otherwise of Ramsar listing in reducing such threats.	<ul style="list-style-type: none"> <li>information sheets for designated sites (see Rec. 4.7)</li> <li>maps of designated sites</li> <li>threats to sites</li> </ul>
Resolution VII/13	Upon accession to the convention; each state shall provide boundaries and description of listed wetlands. Each additional site designated after shall also be described and delimited on a map. The Bureau in consultation with Parties over the next triennium to establishes a review process on guidelines for national reporting and an agreed procedure for assessing the state of wetland resources	<ul style="list-style-type: none"> <li>boundaries and descriptions of sites</li> <li>completed information sheets on Ramsar wetlands (see Rec. 4.7)</li> </ul>
Resolution VII/16	Report of national activities and identification of sites of importance. A format is specified, which includes key questions related to each of the eight General Objectives of the Strategic Plan.	<ul style="list-style-type: none"> <li>current hydrological expertise</li> </ul>
Resolution VII/21	Ramsar and Water. Calls on Parties to encourage <ul style="list-style-type: none"> <li>links with organisations to support hydrological monitoring networks</li> <li>study of traditional water management systems</li> <li>studies on economic value of water in wetlands</li> </ul>	<ul style="list-style-type: none"> <li>traditional water management systems</li> <li>economic value of wetlands</li> </ul>
Resolution VII/23	Report of national activities and identification of sites of importance. A format is specified, which includes key questions related to each of the eight General Objectives of the Strategic Plan.	<ul style="list-style-type: none"> <li>details of actions (meetings, work with neighbouring countries) to encourage others to join convention</li> </ul>
Notification 1998/1		<ul style="list-style-type: none"> <li>status and details of National Wetland policy/strategy/action plan</li> </ul>
		<ul style="list-style-type: none"> <li>education programmes and public awareness on wetlands</li> </ul>
		<ul style="list-style-type: none"> <li>capacity building</li> </ul>
		<ul style="list-style-type: none"> <li>management plans for Ramsar sites</li> </ul>
		<ul style="list-style-type: none"> <li>inventory of wetlands</li> </ul>
		<ul style="list-style-type: none"> <li>details of activities for the planned management of transfrontier wetlands</li> </ul>
		<ul style="list-style-type: none"> <li>mechanisms to assist dialogue between Ramsar Administrative Authority and other international convention personnel</li> </ul>
		<ul style="list-style-type: none"> <li>financial contributions to further the work of the convention</li> </ul>
		<ul style="list-style-type: none"> <li>cooperation and relationship with NGOs</li> </ul>
		<ul style="list-style-type: none"> <li>comments on implementation of the Ramsar Strategic Plan and the functioning/relationship with the various convention bodies</li> </ul>

## World Heritage Convention

Article	Summary	Key Information
Article 1	Definition of the cultural heritage	inventory of cultural heritage
Article 2	Definition of natural heritage	inventory of natural heritage
Article 3	Each Party to identify and delineate the different properties on its territory mentioned in Articles 1 and 2	species distribution, status (esp. globally threatened species) and habitat requirements
Article 4	Each Party has the duty of ensuring the identification, protection, conservation, presentation and transmission to future generations of the cultural and natural heritage situated on its territory. To ensure that effective and active measures are taken for the protection, conservation and presentation of cultural and natural heritage, each party shall endeavour to:	<ul style="list-style-type: none"> <li>adopt a general policy which aims to give heritage a function in the life of the community and to integrate the protection of that heritage into planning</li> <li>setup services for the protection, conservation and presentation of heritage</li> <li>develop scientific and technical studies and research and to develop operating methods for countering threats to heritage</li> <li>take appropriate, legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, and rehabilitation of this heritage</li> <li>foster development of national regional centres training in the protection, conservation and measurement of heritage and to encourage scientific research in this field</li> </ul>
Article 5	Parties recognise that heritage constitutes a world heritage whose protection is an international responsibility. Parties undertake to not cause any deliberate damage to heritage sites.	inventory of heritage sites
Article 6	Definition of international protection of the world cultural and natural heritage	name
Article 7	Intergovernmental Committee for the protection of the world cultural and natural heritage	geographical location (country, state, region, coordinates)
Article 8-10	Every Party shall submit to the World Heritage Committee an inventory of property forming part of the cultural and natural heritage; a set of guidelines for the submission of nominations of cultural and natural properties was adopted by the Committee at its 20 <sup>th</sup> session in December 1996 and is included as part of the <i>Operational Guidelines for the implementation of the World Heritage Convention</i> .	map including any buffer zones
Article 11-12	The Committee, on the basis of inventories submitted by Parties, shall maintain a <i>World Heritage List and List of World Heritage in Danger</i> . The <i>Operational Guidelines for the implementation of the World Heritage Convention</i> provide a format for a tentative list (given in Annex A of the guidelines), and criteria for the inclusion of properties in the List of World Heritage in Danger	<ul style="list-style-type: none"> <li>size</li> <li>significance and criteria under which proposed (see Article 11)</li> <li>description</li> <li>management (ownership, legal status, site management)</li> <li>factors affecting the site (development pressures, environmental pressures etc.)</li> <li>indicators for measuring the state of conservation</li> <li>documentation (photographs, management plans, bibliography)</li> <li>ascertained danger to heritage sites (e.g. decline in threatened species for which site was established, habitat change, human development, pollution mining)</li> </ul>

Article	Summary	Key information
Article 13	Requests for international assistance to secure the protection, conservation, presentation or rehabilitation of heritage sites.	<ul style="list-style-type: none"> <li>potential danger to heritage sites (e.g. modification of legal measures, planned developments, lack of management plan)</li> <li>action and costs required to counter "danger" see Articles 11-12.</li> </ul>
Article 14	Secretary to assist World Heritage Committee	
Article 15-18	Fund for the protection of the world cultural and natural heritage.	
Article 19-26	Conditions and arrangements for international assistance.	<ul style="list-style-type: none"> <li>threats to heritage sites</li> <li>action and costs required to counter threats</li> </ul>
Article 27-28	Educational programmes.	<ul style="list-style-type: none"> <li>legislative and administrative provisions adopted</li> <li>other action taken for the application of the convention</li> </ul>
Article 29	Reports	
Article 30-38	Final clauses	
WHC-97/CONF.208/17	Report of the XXI session of the World Heritage Committee. The Committee took note of the resolution adopted by the twenty-ninth General Conference of UNESCO on the periodic reporting by the States Parties on the legislative and administrative provisions and other actions which they have taken for the application of the Convention, including the state of conservation of the World Heritage properties located on its territories. Requested the Secretariat jointly with the advisory bodies to prepare, on the basis of the observations made by the Committee, for consideration by the 22 <sup>nd</sup> session of the Bureau in 1998, a draft format for the periodic reporting by the States Parties on the application of the World Heritage Convention and on the state of conservation of World Heritage properties.	

## APPENDIX IV – PARTIES TO THE CONVENTIONS

### Major global Conventions relevant to biodiversity as at May 1998

	CBD	CITES	CMS	RAMSAR	WHD
Afghanistan	S	R	-	-	R
Albania	R	-	-	R	R
Algeria	R	R	-	R	R
Andorra	-	-	-	-	R
Angola	S	-	-	-	R
Antigua & Barbuda	R	R	-	-	R
Argentina	R	R	R	R	R
Armenia	R	-	-	R	R
Australia	R	R	R	R	R
Austria	R	R	-	R	R
Azerbaijan	S	-	-	-	R
Bahamas	R	R	-	R	-
Bahrain	R	-	-	R	R
Bangladesh	R	R	-	R	R
Barbados	R	R	-	-	-
Belarus	R	R	-	-	R
Belgium	R	R	R	R	R
Belize	R	R	-	-	R
Benin	R	R	R	-	R
Bhutan	R	-	-	-	-
Bolivia	R	R	-	R	R
Bosnia & Herzegovina	-	-	-	-	R
Botswana	R	R	-	R	-
Brazil	R	R	-	R	R
Brunei	-	R	-	-	-
Bulgaria	R	R	-	R	R
Burkina Faso	R	R	R	R	R
Burundi	R	R	-	-	R
Cambodia	R	R	-	-	R
Cameroon	R	R	R	-	R
Canada	R	R	-	R	R
Cape Verde	R	-	-	-	R
Central African Republic	R	R	S	-	R
Chad	R	R	R	R	-
Chile	R	R	R	R	R
China	R	R	-	R	R
Colombia	R	R	-	-	R
Comoros	R	R	-	R	-
Congo, D.R.	R	R	R	R	R
Congo, Republic	R	R	-	-	R
Costa Rica	R	R	-	R	R
Côte d'Ivoire	R	R	S	R	R
Croatia	R	-	-	R	R
Cuba	R	R	-	-	R

	CBD	CITIES	CMS	RAMSAR	WHD
Cyprus	R	R	-	-	R
Czech Republic	R	R	R	R	R
Denmark	R	R	R	R	R
Djibouti	R	R	-	-	-
Dominica	R	R	-	-	R
Dominican Republic	R	R	-	-	R
Ecuador	R	R	-	R	R
Egypt	R	R	R	R	R
El Salvador	R	R	-	-	R
Equatorial Guinea	R	R	-	-	-
Eritrea	R	R	-	-	-
Estonia	R	R	-	R	R
Ethiopia	R	R	-	-	R
F.S. Micronesia	R	-	-	-	-
Fiji	R	R	-	-	R
Finland	R	R	R	R	R
France	R	R	R	R	R
Gabon	R	R	-	R	R
Gambia	R	R	-	R	R
Georgia	R	R	-	R	R
Germany	R	R	R	R	R
Ghana	R	R	R	R	R
Greece	R	R	s	R	R
Grenada	R	-	-	-	-
Guatemala	R	R	-	R	R
Guinea	R	R	R	R	R
Guinea-Bissau	R	R	R	R	-
Guyana	R	R	-	-	R
Haiti	R	-	-	-	R
Honduras	R	R	-	R	R
Hungary	R	R	R	R	R
Iceland	R	-	-	R	R
India	R	R	-	R	R
Indonesia	R	R	R	R	R
Iran	R	R	-	R	R
Iraq	-	-	-	-	R
Ireland	R	-	R	R	R
Israel	R	R	R	R	-
Italy	R	R	R	R	R
Jamaica	R	R	s	R	R
Japan	R	R	-	R	R
Jordan	R	R	-	R	R
Kazakhstan	R	-	-	-	R
Kenya	R	R	-	R	R
Kiribati	R	-	-	-	-
Korea, D.P.R.	R	-	-	-	-
Korea, Republic	R	R	-	R	R
Kuwait	s	-	-	-	-
Kyrgyzstan	R	-	-	-	R

	CBD	CITES	CMS	RAMSAR	WIC
Laos	R	-	-	-	R
Latvia	R	-	-	-	R
Lebanon	R	-	-	-	R
Lesotho	R	-	-	-	-
Liberia	S	R	-	-	R
Libya	S	-	-	-	-
Liechtenstein	R	R	-	R	-
Lithuania	R	-	-	R	R
Luxembourg	R	R	-	-	R
Macedonia F.Y.R.	R	-	-	R	R
Madagascar	R	R	S	-	R
Malawi	R	R	-	R	R
Malaysia	R	R	-	R	R
Maldives	R	-	-	-	R
Mali	R	R	R	R	R
Malta	S	R	-	R	R
Marshall Islands	R	-	-	R	-
Mauritania	R	-	-	R	R
Mauritius	R	R	-	R	R
Mexico	R	R	-	R	R
Moldova	R	-	-	-	-
Monaco	R	R	R	R	R
Mongolia	R	R	-	R	R
Morocco	R	R	R	R	R
Mozambique	R	R	-	-	R
Myanmar	R	R	-	-	R
Namibia	R	R	-	R	-
Nauru	R	-	-	-	-
Nepal	R	R	-	R	R
Netherlands	R	R	R	R	R
New Zealand	R	R	-	R	R
Nicaragua	R	R	-	R	R
Niger	R	R	R	R	R
Nigeria	R	R	R	R	R
Norway	R	R	R	R	R
Oman	R	-	-	R	R
Pakistan	R	R	R	R	R
Palau	-	-	-	-	-
Panama	R	R	R	R	R
Papua New Guinea	R	R	-	R	R
Paraguay	R	R	S	R	R
Peru	R	R	R	R	R
Philippines	R	R	R	R	R
Poland	R	R	R	R	R
Portugal	R	R	R	R	R
Qatar	R	-	-	-	R
Romania	R	R	-	R	R
Russia	R	R	-	R	R
Rwanda	R	R	-	-	-

	CBD	CITES	CMS	RAMSAR	WCMC
San Marino	R	-	-	-	R
São Tomé & Príncipe	s	-	-	-	R
Saudi Arabia	-	R	R	-	R
Senegal	R	R	R	R	R
Seychelles	R	R	-	-	R
Sierra Leone	R	R	-	-	-
Singapore	R	R	-	-	-
Slovakia	R	R	R	R	R
Slovenia	R	-	-	R	R
Solomon Islands	R	-	-	-	R
Somalia	-	R	R	-	-
South Africa	R	R	R	R	R
Spain	R	R	R	R	R
Sri Lanka	R	R	R	R	R
St Kitts-Nevis	R	R	-	-	-
St Lucia	R	R	-	-	-
St Vincent	R	R	-	-	-
Sudan	R	R	-	-	R
Suriname	R	R	-	R	R
Swaziland	R	R	-	-	-
Sweden	R	R	R	R	R
Switzerland	R	R	R	R	R
Syria	R	-	-	-	R
Tajikistan	R	-	-	-	R
Tanzania	R	R	-	-	R
Thailand	s	R	-	-	R
Togo	R	R	R	R	-
Tonga	-	-	-	-	-
Trinidad & Tobago	R	R	-	R	-
Tunisia	R	R	R	R	R
Turkey	R	R	-	R	R
Turkmenistan	R	-	-	-	R
Tuvalu	s	-	-	-	-
Uganda	R	R	s	R	R
Ukraine	R	-	-	R	R
United Arab Emirates	s	R	-	-	-
United Kingdom	R	R	R	R	R
Uruguay	R	R	R	R	R
USA	s	R	-	R	R
Uzbekistan	R	R	-	R	R
Vanuatu	R	R	-	-	-
Venezuela	R	R	-	-	R
Viet Nam	R	R	-	R	R
Western Samoa	R	-	-	-	-
Yemen	R	R	-	-	R
Yugoslavia	s	-	-	R	R
Zambia	R	R	-	R	R
Zimbabwe	R	R	-	-	R

**Notes.** 'R' = states Party to the relevant convention, ie. have ratified, accepted, acceded or approved.  
's' non-Party states that have signed the convention but not yet ratified. Information as at March 1998.  
**CBD** Convention on Biological Diversity, **CITES** Convention on International Trade in Endangered Species of Wild Fauna and Flora, **CMS** Convention on the Conservation of Migratory Species of Wild Animals, **RAMSAR** Convention on Wetlands of International Importance especially as Waterfowl Habitat, **WHC** Convention concerning the Protection of the World Cultural and National Heritage..  
Shaded areas indicate membership of all five biodiversity-related conventions.



## APPENDIX V – COMMENTS FROM THE SECRETARIATS ON INFORMATION MANAGEMENT ISSUES AND NEEDS

### CBD:

- availability of IT staff extremely limited
- no index or metadata of documents - retrieved by file naming convention
- massive job to manage meeting documents, means little capacity to analyse

### CITES

- field project information is not structured and is hard to access
- analysis of legislation (by ELC) is not used by Parties
- need to be able to: analyse trends in species, track non-CITES species for early warning, get a global picture about factors affecting species population
- difficult to align data fields with Interpol and WTO
- need more analysis capacity to assess effectiveness of Convention
- need a lessons-learned file (not just successes)

### CMS:

- limited internal IT capacity - need more staff
- web page needs improvements, e.g. links to agreements
- information in past country reports is virtually inaccessible - not indexed, not digital
- lack information on the effectiveness of the Convention and Agreements
- need information on non-Parties as well, to get global picture
- need to use additional information sources, e.g. WCMC, BCIS
- need examples of effective implementation of information management to help Parties
- future need for spatial analysis (GIS)

### Ramsar:

- directory of site descriptions last printed in 1993 - needs to be automated and maintained on web
- in general information is not “easy to use”
- maps provided are poor and not digitised
- need links to Protected Areas Database (IUCN/WCMC)
- regional directories of wetlands need harmonisation
- need to improve information sharing with other conventions, especially CMS
- need analytical capacity - e.g. which Ramsar sites are critical to listed CMS species
- need a clearing house of success stories on successful management practice, habitat rehabilitation, etc.
- need a clearing house of national and site management plans
- current database is difficult to use and results of queries are hard for Parties to understand
- paper files submitted by Parties (Annexes) are not indexed, so difficult to use
- need connections to Wetlands International waterbird census data

WHC:

- national reports difficult to access - not indexed, not digital
- need better links to CMS (e.g. Siberian Cranes)
- need improved links to CITES and Ramsar
- difficult to extract information on projects conducted on sites
- overall need for case studies to be available for site managers, local and national committees
- need better access to all nomination documents
- progress limited by resources - “too busy” for reflection or analysis

## APPENDIX VI – WORKSHOP DISCUSSION PAPERS

### Towards a Harmonised Information Management Infrastructure for the Biodiversity Conventions

#### Workshop Discussion Paper 1

##### Harmonisation in Support of the Management of Information Supplied by Parties

###### **Concept:**

Parties submit a wealth of information to each convention Secretariat. This may include reports on the conservation activities of the contracting country, detailed information about the designation of a site, or proposals to include a species in the appendices of say CITES or CMS. Combined, these reports represent an important and impressive data collection. However, the potential value of this data set is not always fulfilled. This is perhaps related to the volume of data that may be submitted combined with the financial overhead of actually investing time to manage the information. There is no structured management of these reports and consequently large amounts of potentially valuable data remain trapped in the text of the original reports. By examining the information received from parties, the concept is to increase the value of the data held within these reports through the development of management information practices, leading to a cross-referenced accessible electronic information resource.

###### **Benefits**

Careful management of the data submitted by Parties will bring several direct benefits both to the Parties and the Secretariats:

- Compilation of standard reports will be simplified; these could include “feedback” reports to Parties as well as “overview” type reports which extract summary information
- Feedback to Parties; by demonstrating the value of their reports, Parties will see benefits in supplying data and will be encouraged to submit their reports
- Development of new reports
- Improved access to the information within the reports
- Ability to conduct electronic searches, allowing users to retrieve information specific to their own needs

As part of the process of improving the management of the reports, “key wording” and the use of standard thesauri (shared between the conventions) will facilitate access to data. Searching for information that is relevant to a particular inquiry would become a

simple operation, and if information was made available on the Internet then searches across all five conventions could be conducted from one common point (see discussion paper 2 for further suggestions concerning the use of the World Wide Web). This would allow users to extract information based on a range of thematic criteria and could not only increase the use and availability of the data but could also reduce the time required to reply to information requests.

The whole process would also support archiving of documents, ensuring that once reports have been received, they are always easy to retrieve, either through the name and year of submission, or through keyword searching.

The idea is to make the information being collected more accessible through careful management of the data. It will be important to identify what information to extract from reports, and to develop suitable data management tools to support the whole process. Through a series of activities, the data gathered by each convention will be managed such that it becomes a valuable information resource that can be easily accessed.

### **Implementation Options and Practical Considerations:**

#### *Improving the value of information supplied by the Parties*

- Identify potential outputs for a range of users (including Parties, media, etc)
- Use the desired outputs to identify which elements of the “text-based” reports could be extracted and incorporated into a database (e.g. population figures, data sources, management practices for protected areas)
- Review reporting guidelines and where necessary improve; in particular develop:
  - standard cover sheet; to be used for all submitted documents providing all basic identification, contact and content information.
  - standard format and content for elements that will be incorporated into a database
- Encourage and support submission of information in machine-readable format, e.g. by providing diskette with report headings and format to be filled in, and/or blank spreadsheet.
- Adopt suitable standards (e.g. taxonomic, geographic entities etc)
- Develop management principles and suitable data management tools
- Catalogue all documents using standard thesauri and develop a shared metadatabase
- Develop “case studies” to illustrate good practice and the possible use and applications of the data
- Capacity building in information management

## Example

- Proposals for inclusion of species on the appendices of the Convention on the Conservation of Migratory species of wild animals require the compilation and presentation of significant amounts of biological data. The proposals include details on distribution, population, habitat requirements, threats etc. These data could be standardised and incorporated into a database designed to manage this wealth of species related information.

## Process considerations

- Process to review information needs and develop standard report formats for key information which may be incorporated into databases report content and to develop standard reports formats for "key" information which may be incorporated into databases
- process to review existing reporting guidelines
- process to co-ordinate nomenclature, definitions, harmonisation of taxonomies etc.
- process to develop thesaurus and key word structure

## **Towards a Harmonised Information Management Infrastructure for the Biodiversity Conventions**

### **Workshop Discussion Paper 2**

#### **Harmonisation in Support of Secretariat “Business”**

##### **Concept:**

Each convention is serviced by a secretariat (or bureau) carrying out a range of functions between meetings of the Conference of the Parties. These may include:

- providing administrative, scientific and technical support to contracting parties
- assisting in convening and organising Conferences and meetings
- informing Parties of decisions, resolutions and recommendations of the Conference
- responding to queries and dissemination of information to international agencies, NGOs, the press media and the public
- co-ordination with other relevant international bodies including the secretariats of other conventions
- co-ordinating subsidiary bodies and committees that may be responsible for providing advice and guidance to the secretariats and for supervising the implementation of policy

This provides a very significant administrative burden on the secretariats including enormous volumes of paper to be distributed and archived.

The concept is to introduce improved information management practices for convention related materials and a common approach across the conventions for disseminating this information leading in the long term to a systematic fully "paperless" exchange and dissemination of information, made as automatic as possible. Some of the elements of this include the standardisation of the approach, format and linkages of secretariat web-sites, a shared web site acting as a gateway to convention specific information and harmonised methods of document managing and archiving (see also discussion paper 1).

##### **Benefits**

A consistent approach to the management and dissemination of information will bring a range of benefits to both Parties and the Secretariats:

- Increased availability of information
- Information available in a standard format
- Single gateway to convention related information

- Improved ability to conduct electronic searches across the conventions, using standard thesauri
- Reduction in time required to complete inquiries
- More effective and efficient co-ordination of conferences, committees and advisory groups

In addition to traditional methods of communication, the World Wide Web offers a cost effective means by which to disseminate convention-related information. Basic documentation on each convention (e.g., convention text), list of Parties, reporting guidelines, meeting reports, meeting dates and so on, can all be made available on the WWW. This would reduce the number of requests made on secretariat staff to answer basic inquiries. The introduction of a “Frequently asked Questions” section could further reduce the time staff devote to routine requests. If the conventions adopt a similar approach and format, then not only would contracting Parties (and other interested organisations and individuals including the media and public) be able to find information more easily, but certain data sets could be combined; for example, lists of Parties. A combined calendar of meetings could encourage more cost-effective attendance at meetings.

Navigating through the wealth of text-based information could be improved by “key-wording” documents and adopting standard thesauri (shared between the conventions). Searching for information that is relevant to a particular inquiry would become a simple operation which could be conducted from one common point, with the option to include or exclude documents pertaining to specific conventions. For example, return a hyper-linked list of all COP documents and meeting reports in the last 12 months relating to “Invasive Species” from all five conventions.

From handling general inquiries through to distributing official notifications, decisions, meeting agendas and background papers, each secretariat manages and disseminates a wealth of information to Parties. This information is managed through a variety of methods, and includes the use of the WWW as a means to disseminate information. The approach adopted by each convention differs. By developing a consistent approach to the management of convention related materials, and adopting standard techniques for the dissemination of this information, the number of inquiries that need special attention will decrease, the time required to process inquiries will be reduced, and the access and availability of information to Parties and others will be improved.

### **Implementation Options and Practical Considerations:**

- Develop similar approaches to managing and dissemination various documents on the WWW
- Shared web site providing a single starting point for all Conventions
- Frequently asked questions section

- Develop shared thesaurus and key words
- Key wording of COP and other documents
- Development of notifications database
- Shared database of Parties
- Standard archiving methodology to enable easy access to documents
- Search facilities for each convention and across all conventions
- Automated dissemination of Conference and committee agendas and meeting papers

### **Example**

All agendas, background papers and subsequent minutes of committee meetings could be circulated by email (as is currently done with the Ramsar STRP and Standing Committee)

### **Process considerations**

- process to develop thesaurus and key word structure
- process to develop and maintain co-ordination of web sites
- process to catalogue and cross reference all convention related materials

## Towards a Harmonised Information Management Infrastructure for the Biodiversity Conventions

### Workshop Discussion Paper 3

#### Harmonisation aimed at Facilitating Parties in Reporting and Convention Implementation

##### **Concept:**

The suggested concept is to implement a system of **Modular Reporting** integrated with operational practices in national networks of biodiversity institutions and data custodians. Parties to conventions would provide information to the convention secretariats as a series of *information packets*, which in total will provide for the reporting requirements of all conventions - with the following characteristics:

- *information packets* are complimentary (non-overlapping) - so that information is provided only once and in one consistent format
- *an information packet* may serve the needs of more than one convention
- *information packets* should be a subset of national biodiversity information management products - that is, are part of the input to national planning and policy development
- *information packets* are produced in a cycle which suits national requirements and that is in harmony with the reporting cycles of the conventions
- the *information packet* process is supported by harmonised guidelines, nomenclature, and thesauri, as well as recommended good practices and information management methodologies

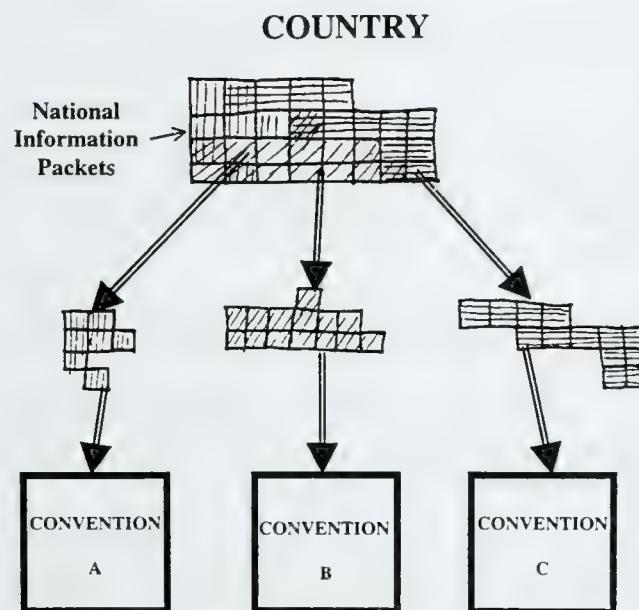
This process will ease the reporting burden on parties, while improving the quality, availability and usefulness of information for national purposes. In addition the process can be easily extended to other environmental treaties through the addition of new relevant *information packets*.

To further facilitate national implementation of the conventions an additional *information packet* of **beneficial case studies** can be added - whether positive "success stories" or examples of mistakes or "horror stories" which may be of use to other countries - to form a shared library or clearing house of *lessons learned* related to convention implementation. This shared resource could include examples of successful (and unsuccessful) field projects in species re-introduction, habitat rehabilitation, threat mitigation, poaching control, etc., through to exemplary legislation, regulation and policy, and guidelines for good sustainable utilisation and other good practices.

Useful computer software and methods of data management could also be shared through a lessons learned library.

(See attached diagrams of the concept)

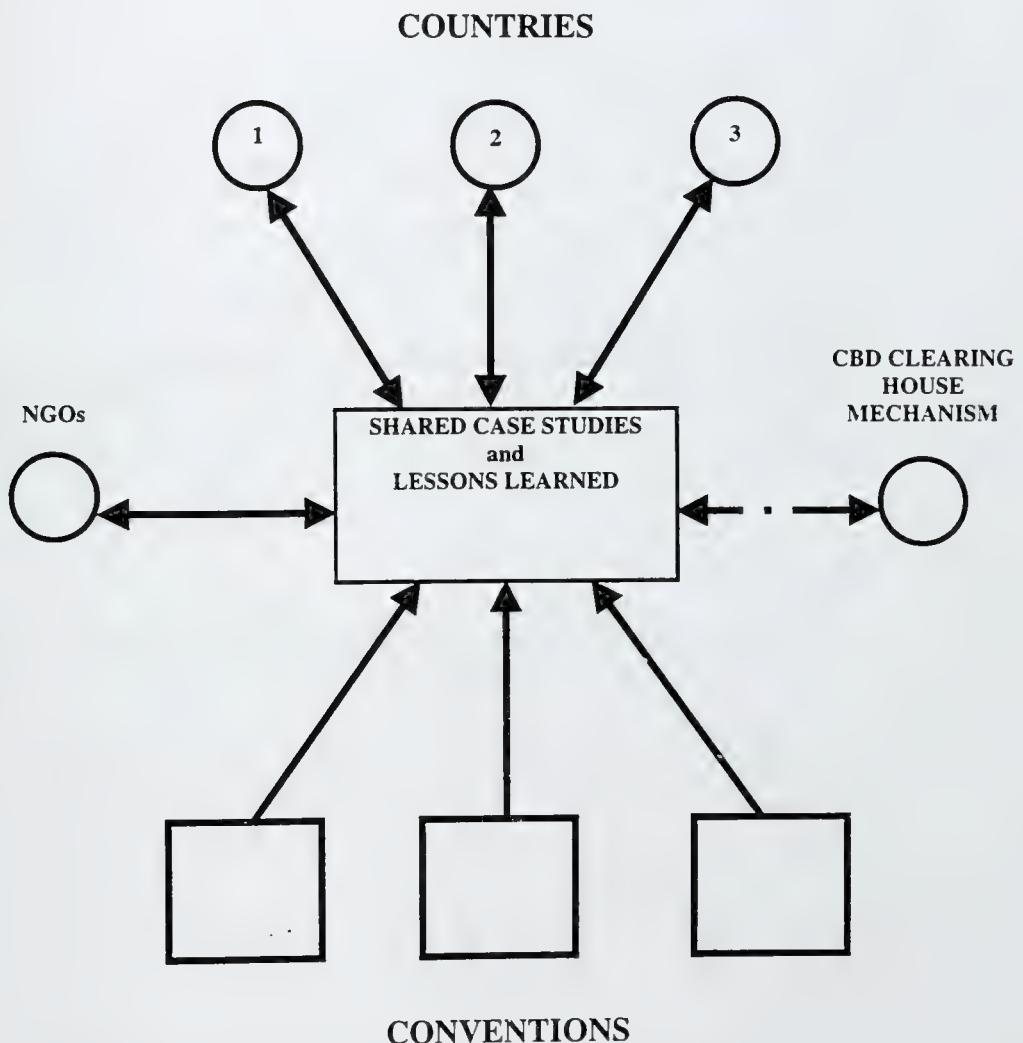
## MODULAR REPORTING



(One Information packet may serve several Conventions)

DP3 - Figure 1

## LESSONS LEARNED LIBRARY



DP 3 - Figure 2

## Implementation Options and Practical Considerations:

### *Towards Modular Reporting*

- Review of reporting requirements to develop and disseminate an overall framework and definition of information packets
- Develop harmonised guidelines for reporting and good information management practice
- Establish single co-ordinating focal point for submission of information packets (e.g. an international information management agency)
- Harmonise reporting cycles to interlock - e.g. adopt 2 and 4 year cycles.
- “Virtual Reporting” - see Discussion Paper 4

### *Practical example:*

*National species population data could be "packaged" to inform CMS of migratory species, support Ramsar designation (and updates), contribute to CITES non-detriment findings, and give context to the assessment of threats to World Heritage sites (e.g. poaching).*

### *Towards a Lessons Learned Library*

- Establish shared lessons-learned site (through an international data custodian on behalf of all secretariats), linked as a node to the CBD Clearing House Mechanism
- Review information currently held in secretariats from party submissions and select most relevant exemplary studies and reports for conversion to electronic format
- Encourage and facilitate countries to submit lessons learned information packets (e.g. add to guidelines for reporting)
- Index and keyword lessons learned to facilitate searching by topic, geographic region, etc.
- Secretariats to provide summary descriptions of projects in progress, similarly indexed.

*Practical example:*

Selected studies of wetland rehabilitation supplied on designation of Ramsar Site: the results of nationally or internationally funded projects on species re-introduction would make excellent contributions to the lessons learned library.

**Process considerations - see also Discussion Paper 5**

- process to co-ordinate scientific methodology considerations
- process to co-ordinate nomenclature, definitions, harmonisation of taxonomies etc.
- process to develop thesaurus and key word structure
- process to define "information packets" and review reporting guidelines for consistency
- process to interlock meeting and reporting schedules
- process to standardise and interlink web-sites and other forms of information dissemination
- process to manage a shared lessons learned library

## Towards a Harmonised Information Management Infrastructure for the Biodiversity Conventions

### Workshop Discussion Paper 4

#### Harmonisation aimed at Improving the Capacity to Assess the Effectiveness of Treaty Implementation

##### Concept:

All five convention secretariats are obligated in some way to periodically assess the effectiveness of the implementation of their respective treaties. In order to place the implementation in a global context, such assessments require analysis both of the information provided by the parties **and** auxiliary information on the situation in non-party countries, and more general information reflecting the global impact as aggregated by international agencies and information managers. The conceptual solution is a system of harmonised "**Virtual Reporting**". This takes the concept of "Modular Reporting" (see Discussion Paper 3) one step farther.

Virtual reporting would see party countries providing access to their information packets in electronic form **continuously updated** in a cycle which suits national needs. The convention secretariats would then select and retrieve the most up-to-date information packets as and when required. The secretariats would further extract (in a similar manner) auxiliary information on the global picture from international information managers and custodians.

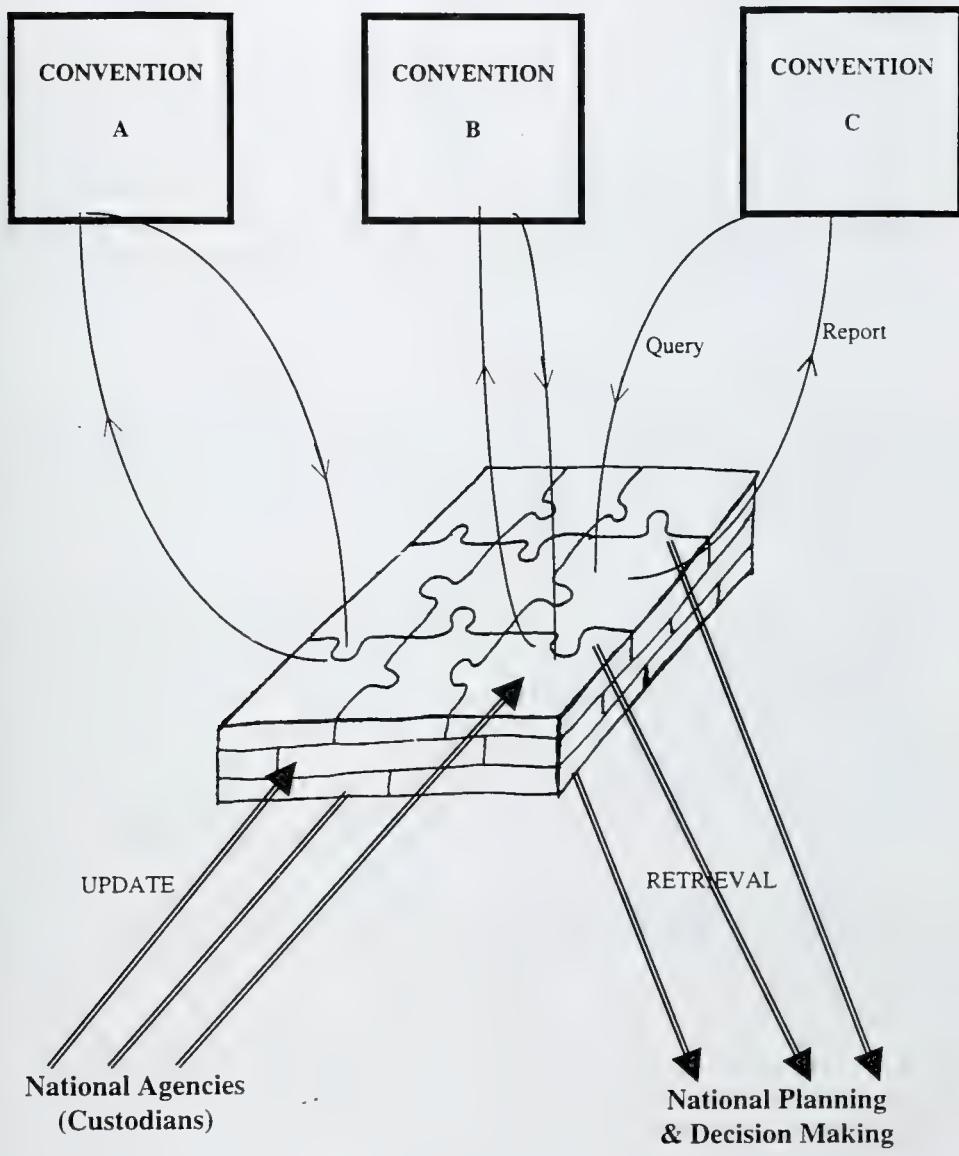
This approach would eliminate duplicate reporting and reduce the effort required for parties to prepare and submit specific reports to the conventions, and more importantly, would serve to encourage integrated national approaches and improved information access and sharing between institutions within party countries. Further, it facilitates links to other conventions and regional bodies, and improves information sharing between neighbouring countries.

(See attached diagram of concept)

##### Implementation Options and Practical Considerations:

The virtual reporting concept can be implemented practically as a national Web Site (or linked network of sites). This would logically be integrated with the national Clearing House node called for in the current concept for the CBD Clearing House Mechanism - and further incorporate the national contribution to the "Lesson Learned" file concept (of Discussion Paper 3). Countries would update the information on a regular periodic basis timed with national cycles such as the census and state-of-the-environment reporting, and whenever there is a significant change relevant to the conventions - such as: changes in

# VIRTUAL REPORTING



(Conventions extract "reports" from national biodiversity information base)

DP4 - Figure 1

the ecological character of a designated area, new legislation or regulation related to species protection, new policies on equitable sharing of benefits, and so on. The secretariats would then extract electronically the most up-to-date information packets whenever needed.

As noted above, to obtain a global overview, in addition to the party-supplied information, the resources of the international data custodian networks must be tapped. Most relevant of these would seem to be WCMC, Wetlands International, and Birdlife International, although other international NGOs may hold contributing information. The newly evolving Biodiversity Conservation Information System (BCIS) is seen as a key avenue for accessing and collating such information. In addition, automated outreach to the data banks of major specialised international agencies such as WMO, FAO, IOC, UNESCO, UNStat, CSD and others will likely prove useful.

As a practical measure, convention secretariats might consider commissioning an international information manager to manage the "virtual reporting" exercise - and associated integration and analysis with global information - on behalf of the secretariat when required. This might occur for instance in the period preceding a Conference of the Parties.

One clear implication is that countries must have Internet connectivity and at least a minimal information technology infrastructure and capacity. While this is already the case for the vast majority of parties to the conventions, capacity building and technology transfer programmes must be established to assist the remaining countries to achieve a basic level of enabling technology. A five-year target for completing a virtual reporting network would seem feasible. As an interim measure, virtual reporting sites could be maintained on behalf of low-capacity countries by regional or international agencies supplied with information on paper or diskette.

The practical implementation of the Virtual Reporting concept also requires the harmonisation elements identified for Modular Reporting, e.g.

- overview framework for information packets
- defined minimum base information (Standard "cover sheet")
- harmonised nomenclature
- multi-lingual thesaurus for keywording

A practical guideline (jointly between the conventions) is needed for developing, organising and maintaining a national virtual reporting site, containing a specified minimum data requirement - to ensure that the selected information can be found and extracted in a consistent manner.

**Process considerations** - see also Discussion Paper 5

- process to co-ordinate scientific methodology considerations
- process to co-ordinate nomenclature, definitions, harmonisation of taxonomies etc.
- process to develop thesaurus and key word structure
- process to develop and maintain guideline on virtual reporting sites
- process to develop and co-ordinate a joint capacity building programme in information management and related Internet technology

## Towards a Harmonised Information Management Infrastructure for the Biodiversity Conventions

### Workshop Discussion Paper 5

#### Process Considerations for Harmonisation

##### **Introduction:**

Harmonisation within the four main opportunity areas identified in Discussion Papers 1 through 4 must be conducted step-wise over time, and must involve continuous interaction between the five secretariats and other supporting organisations. Further, even when achieved, harmonisation measures need a means of maintaining the level of success. For example, a one-time project could implement harmonised and linked Web-sites for the Conventions -- but an on-going function (e.g. a shared "Web-Master") would be required to maintain the level of similarity and co-ordination between the sites.

The four earlier Discussion Papers identified 10 functional areas, which might require an on-going process:

- a) Co-ordination of scientific methodology considerations
- b) Co-ordination of the use of nomenclature, definitions, harmonisation of taxonomies, etc.
- c) Developing or adopting a consistent thesaurus and key word structure
- d) Integration and interlocking of meeting and reporting schedules
- e) Standardisation and inter-linking of Web-sites and other forms of information dissemination
- f) Developing and maintaining guidelines on virtual reporting sites
- g) Defining "information packets" and refining reporting guidelines for consistency
- h) Developing and co-ordinating a joint capacity building programme in information management and related Internet technology
- i) Management of a shared lessons-learned library
- j) Co-ordinated review of information needs and development of standard report formats for key information which may be incorporated into databases

## **Implementation Options and Practical Considerations:**

It is clear that achieving and maintaining the desired harmonisation will require ongoing means for the five Convention Secretariats to exchange views and co-ordinate actions at the working level. This can be achieved in a number of ways, including standing committees, working groups, advisory groups, and shared external information managers. The following are some suggestions for the key processes:

- 1) Co-ordination of scientific methodology considerations and the use of nomenclature, definitions, harmonisation of taxonomies, etc.(processes a and b above)

*Suggestion:*

A joint Scientific Advisory Committee to address issues of harmonisation of taxonomies, species lists, and scientific methodologies. This shared committee could be considered as scientific advisors to all the Conventions - for instance providing advice to the SBSTTA of CBD. The participation of appropriate international NGOs is also suggested. For example, WCMC recently conducted a review towards harmonisation of the Red Lists and the CMS Appendices, on behalf of the Scientific Council of CMS. The Joint Scientific Advisory Committee could potentially be formed through an extension of existing scientific committees of the conventions.

In addition this Scientific Committee could convene a sub-committee to deal with issues of harmonisation of nomenclature and scientific definitions.

- 2) Developing or adopting a consistent thesaurus and key word structure (process c above)

*Suggestion:*

This could be a specific task for the above noted sub-committee, with the assistance of an international NGO familiar with thesaurus and metadatabase issues.

- 3) Defining "information packets" and refining reporting guidelines for consistency and integration, review of information needs, and developing standard formats for key information to be incorporated into databases (processes g and j above) and interlocking of meeting and reporting schedules

*Suggestion:*

A joint working group on information management using shared resources (under the direction of a Steering Committee) which reviews information needs in each convention, subdivides these needs into well defined information packets and recommends adjusting reporting guidelines and database structures appropriately. Such a working group should also consider the needs for information dissemination.

Such a group is likely to need scientific advice in the design and specification of measures and indicators of biodiversity, ecosystem health and the like. An additional sub-committee (on indicators) of the Scientific Advisory Committee is suggested.

- 4) Standardisation and inter-linking of Web-sites and other forms of information dissemination, developing and maintaining guidelines on virtual reporting sites, and management of a shared lessons-learned library (processes e, f, and i above)

*Suggestion:*

A joint Working Group on Information Technology consisting of the "information officers" or "IT Managers" of each convention, with the assistance of a shared international information manager and/or technology consultant. There would seem to be considerable advantage to having an external agency manage the tasks required, under the direction of the Working Group.

- 5) Developing and co-ordinating a joint capacity building programme in information management and related Internet technology (process d above)

*Suggestion:*

A joint working group, which identifies common capacity building needs, seeks shared funding, and engages shared resources to implement capacity building programmes.

- 6) Integration and interlocking of meeting and reporting schedules

*Suggestion:*

An international treaty co-ordination process (possibly extending beyond the five Conventions) exercised by an international agency - e.g. the Convention Co-ordination meetings currently hosted by UNEP. Under its auspices, the working group could be charged with reviewing and summarising meeting and structures of the convention secretariats and making recommendations on alignment of schedules, joint meetings and committees - with a view to reducing the burden on Parties and secretariats and identifying potential areas of administrative efficiency.

## **Summary**

In summary it is suggested that the following process elements would be beneficial:

### **Treaty Harmonisation Steering Committee**

- High level representation of each convention
- Oversight of all joint activities and projects directed to harmonisation
- Review and approval of joint funding proposals

Information Management Steering Committee- Guidance from a joint working group on:

- Review of information needs
- Structuring of information for better access and use
- Data archiving

**Joint Information Management Working Group**

- Conducts review of information needs of each secretariat
- Recommends on improved structuring and access to information, and information dissemination
- Assisted by consulting resources to complete specific studies

**Joint Information Technology Working Group**

- Design of harmonised linked Web sites
- Guidelines on national Web sites and information systems for "Virtual Reporting"
- Methods of digital report submission
- Advice on IT capacity building
- Network linkages to BCIS, CBD Clearing House, International databases etc
- Liaison with shared information managers and maintenance of WWW sites

**Scientific Advisory Committee**

- Advice on all scientific issues - especially harmonisation of methodologies and terminology
- Sub-Committee on nomenclature, definitions, thesauri and keywording
- Sub-Committee on biodiversity measures and indicators

**Treaty Co-ordination Meetings**

- Hosted by international agency
- Broader than biodiversity treaties
- Review of structures (committees, subsidiary bodies)
- Review of schedules, especially of meetings, opportunities for sharing
- (as well as broad issues of treaty synergies)

Note: "Working Groups" are not expected to have formal meetings, except infrequently; interaction would mainly be by email.



## TABLE OF SHORT AND LONG TERM OPPORTUNITIES

Opportunity Area	Ultimate Vision	Short / Medium Term Actions
<p>1.</p> <p><b>Managing Information Provided by Parties -</b> Improving access for effective use and sharing</p>	<p>1.1</p> <p>Interlinked Accessible Information Resource of reports and national submissions</p>	<p><i>Short Term:</i></p> <p>1.1.1 Develop standard cover sheet (digital) to use for all national documents and standard format for elements to be incorporated into a database</p> <p>1.1.2 Encourage and facilitate digital submission of reports</p> <p><i>Medium Term:</i></p> <p>1.1.3 Develop standard terminology (thesaurus) for keywording the content of documents</p> <p>1.1.4 Develop a shared catalogue (Metadatabase) of Documents (standard cover sheet, terminology, taxonomy)</p> <p>1.1.5 Selected key documents available on Convention web sites</p> <p>1.1.6 Identify the information needs of a range of user groups</p> <p>1.1.7 Use the above to identify which elements of the text-based reports could be extracted and incorporated into a database</p>
<p>2.</p> <p><b>Management and Communication of Secretariat Business</b></p>	<p>2.1</p> <p>Linked Harmonised web sites with a shared point of entry</p> <p>...</p>	<p><i>Short Term:</i></p> <p>2.1.1 Standardise the look and basic minimum information on each web site</p> <p>2.1.2 Add FAQ section to each web site</p> <p><i>Medium Term:</i></p> <p>2.1.3 Develop a shared catalogue/metadatabase of all official documents (keyworded according to standard thesaurus)</p> <p>2.1.4 Implement a First-point-of-entry web site with search engine to explore across all convention official and national documents</p>

Opportunity Area	Ultimate Vision	Short / Medium Term Actions
2. <b>Management and Communication of Secretariat Business</b>	2.2 Paperless exchange and dissemination of all business documents	<p><i>Short Term:</i></p> <p>2.2.1 Implement a shared on-line meeting schedule and shared database of parties.</p> <p><i>Medium Term:</i></p> <p>2.2.2 Harmonise methods of document management and archiving – consider shared archive or clearing house (machine readable as much as possible)</p> <p>2.2.3 Develop procedures for the automated exchange and dissemination of relevant documents</p>
3. <b>Facilitating Parties to Implement Treaties and Report.</b>	3.1 Modular Reporting	<p><i>Short Term:</i></p> <p>3.1.1 <i>Proforma</i> machine readable report formats distributed on diskette</p> <p>3.1.2 Use standard report cover sheets as catalogue/metadatabase entries</p> <p><i>Medium Term:</i></p> <p>3.1.3 Rationalisation of national authorities</p> <p>3.1.4 Merge or share committees and advisory groups where possible</p> <p>3.1.5 Develop capacity building starter kits for parties</p> <p>3.1.6 Review reporting requirements and divide into structured information packets, and distribute to parties an overview of joint reporting requirements</p> <p>3.1.7 Establish a single co-ordinating focal point for submission of information packets (e.g. in an international information management agency)</p>

Opportunity Area	Ultimate Vision	Short / Medium Term Actions
<p>3.  <b>Facilitating Parties to Implement Treaties and Report.</b></p>	<p>3.2  Lessons Learned Library</p>	<p><i>Short Term:</i>  3.2.1  Select and provide case-studies or lessons-learned from existing archives to establish a preliminary site</p> <p><i>Medium Term:</i>  3.2.2  Use shared web site to make available the shared Lessons -Learned Library</p> <p>3.2.3  Encourage and facilitate submission of national case studies to Lessons-Learned Library.</p>
<p>4.  <b>Assessing the Effectiveness of Treaty Implementation</b></p>	<p>4.1  Virtual Reporting</p>	<p><i>Short Term:</i>  4.1.1  Improve structure, content and consistency of national reports based on information needs of the convention – including basic attributes or indicators which can be used to establish trends</p> <p><i>Medium Term:</i>  4.1.2  Simplify reporting requirements to include only that information relevant to assessing the implementation of the treaty or of benefit to parties.</p> <p>4.1.3  Capacity building in developing national biodiversity information bases</p> <p>4.1.4  Pilot projects in Virtual Reporting</p>
<p>4.  <b>Assessing the Effectiveness of Treaty Implementation</b></p>	<p>4.2  Networking with international data custodians, major databanks and other treaties</p>	<p><i>Short Term:</i>  4.2.1  Summarisation of national reports and state-of-implementation assessment at each CoP</p> <p><i>Medium Term:</i>  4.2.2  Share the use of international data custodians for access to additional non-party information</p>



## APPENDIX VII – WORKSHOP OUTPUTS

Summary Report from the Feasibility Study Workshop  
 Harmonising Information Management of the Biodiversity Treaties  
 Geneva, Switzerland, 27-28 April, 1998

### 1. Workshop aims:

- to agree on actions that could be taken towards harmonising information management of the five biodiversity-related conventions;
- to outline a funding and implementation strategy for each action; and
- to agree remaining tasks for WCMC to complete the *Feasibility Study*.

### 2. Background

Prior to the Workshop, the *Feasibility Study* had involved:

- Reviewing the information needs of the Conventions as implied by their articles and related decisions
- Summarising national reporting requirements
- Consulting with senior officials of all five conventions
- Analysing opportunities for potential harmonisation – embodied in five discussion papers circulated to the five convention secretariats for comment
- Synthesising comments on these discussion papers to identify priorities in the form of a Framework for Action

### Summary of discussions

### 3. Visions

#### i) *Conventions information resource*

An information resource accessible to parties of the biodiversity-related conventions was agreed as a desirable ultimate vision.

#### ii) *Paperless business within the conventions*

"Paperless" convention business was not seen as an ideal goal in itself. Secretariats should seek to optimise the efficiency of their operations. This might include a reduction in paper and increase in the use of electronic communications.

#### iii) *Virtual reporting*

It was noted that such an approach served to integrate reporting to conventions with national strategies, policies and actions plans, and was similar to

proposals put forward by the CSD in regard to national sustainable development web sites.

Some concerns, however, were raised about the feasibility or desirability of the "Virtual Reporting" vision as described in the Discussion Papers. Several participants felt that it would always be necessary for parties to provide additional analysis and national assessment specific to treaty requirements, and this could not be achieved entirely through the "Virtual Reporting" process. It was better therefore to describe the vision as leading towards a national biodiversity information resource which could serve the dual purposes of supporting national strategies and plans, as well as facilitate reporting to the conventions. An ancillary benefit from this approach was that it would encourage the better coordination and integration of activities to implement the various conventions at national level.

#### *iv) Open-Access Lessons-Learned Library*

The vision of a "Lessons-Learned Library" on treaty implementation was well supported, but it was emphasised that the concept should be one of a linked **network** or clearing house rather than a central repository. There were concerns expressed about the willingness of parties to contribute lessons learned, but note was taken of the experience of the Ramsar Bureau – following an initial posting of examples contributions flowed in rapidly.

Based on these discussions, the vision statements were revised to be as follows:

- *Harmonised conventions information resource*
- *Optimised efficiency of secretariat operations*
- *Streamlined national reporting to facilitate reporting to, and implementation of conventions*
- *A lessons-learned network*

### **4. Short and Medium Term Actions in support of Secretariats**

The proposed actions were discussed according to the "boxes" in the Framework for Action (included for reference at Appendix II), and briefly summarised as follows:

#### *i) Standard Cover Sheet*

This was seen as a useful step towards building harmonised meta-databases to assist in accessing and sharing information. The principal implication was the need to adopt consistent standards for such items as country names, document types, dates and so on.

ii) Standard thesaurus for key-wording

A standard limited vocabulary expressed as keywords on each document cover sheet would be a significant aid to document access and retrieval, and a necessary pre-cursor to creating an inter-convention search engine. A multi-lingual thesaurus such as Envoc (UNEP-Infoterra) would further assist in the ability to locate valuable information in a different language. The example was given of the use of a selected sub-set of Envoc in the UK CHM. It was agreed that such a thesaurus should be kept at a high level of terminology (relatively few terms) in order to be easy to use and effective for searching. Concern was expressed over the level of manpower required to keyword documents, particularly retrospectively. Individual secretariats would consider to what extent previous reports and documents should be key-worded.

iii) Accessible shared meta-database of all documents

The phrase "all documents" was considered to be excessive, rather the meta-database should include the most relevant documents, and again the issue of retrospective inclusion would depend on available resources. The action was therefore abbreviated to be simply "meta-database".

iv) Shared document archive

This idea was generally agreed to be impractical and unnecessary and was deleted from the actions.

v) Harmonised secretariat web sites

The principal concern was not to overly restrict the freedom of secretariats to present their conventions and information in creative and appropriate ways. It was agreed that this would be a beneficial action, but should be restricted to identifying minimum common elements and linkages so that users could easily find the same basic information available at each site, while recognising there would be aspects unique to each treaty.

vi) Shared meeting schedule, and convention documents available on web sites

These two actions were regarded as sub-steps which are part of the action to harmonise the web sites. For simplification of the action streams these were therefore subsumed into that one action.

vii) Central entry site and inter-convention search engine

These two actions were seen as integral and thus should appear as a single action. It was clarified that entry did not refer to data entry, but rather a single gateway for the convenience of users searching for information across conventions. UNEP suggested that the current IUC site could be a possible host for the entry site and search engine.

viii) Automated document distribution

Automated document distribution was seen as potentially problematical and difficult to harmonise between conventions, and thus was removed from the action stream.

The two streams of action depicted in this section of the Framework leading towards the visions of a *conventions information resource*, and *optimised efficiency of secretariat operations* had many linkages and interactions, and would best be integrated as one action stream.

The result of this discussion was the single Action Stream 1 depicted in the agreed Actions Streams of Appendix III.

It was agreed that WCMC would in its Feasibility Study Report make recommendations on:

- aspects of the web sites which should be harmonised (minimum content)
- the minimum content of a standard document coversheet
- thesaurus selection for key-wording and searching the meta-database

## 5. Short and medium term actions for the contracting parties

As above these are discussed relative to the action boxes in the Framework (included for reference at Appendix II).

i) *Review of information needs of the conventions*

It was acknowledged that the review was part of the *Feasibility Study*. WCMC will describe more closely the reporting requirements of the conventions and identify information needs, overlaps and synergies for the final report.

ii) *Blank or proforma reports*

The Ramsar Bureau commented favourably on their experience with this approach. In general it was agreed that this was a pre-requisite for the preparation of an integrated reporting handbook. For simplification, it was removed from the action stream.

iii) *Handbook of reporting guidelines*

The proposed handbook would be an integrated guideline for national reporting which would assist countries to prepare reports as a series of modules. It was believed vital to engage in a number of "proof-of-concept" pilot tests with an appropriate range of countries, in order to refine the handbook. This pilot testing was added as a separate action.

iv) *Capacity building in national biodiversity information banks and related technology*

Concern was expressed that capacity building was not strictly speaking a harmonisation activity, although it would assist towards the desirable goal of harmonised national information resources in biodiversity. Again a pilot phase would be needed before proceeding to full implementation.

v) *Select lesson learned from existing secretariat documents*

It was pointed out that the lessons learned library was not entirely a "country-driven" activity, although national inputs, or linkages to national lessons-learned were to be sought at later stages. Many similarities were noted as well to the meta-database building proposed for the conventions information resource - for instance similar issues of vocabulary for key-wording may arise. It was agreed, however that it should remain as a separately described stream that should be closely allied with the meta-database development, and linked to the CBD CHM efforts.

The successful model of the Ramsar Bureau began with this step and the action stream was adjusted to incorporate their experience.

vi) *Prototype lesson learned web site*

Following the Ramsar example, it was recognised that this might be simply an additional page on existing secretariat web sites.

vii) *Solicit lessons learned from development agencies and parties*

Concern was expressed at the implied burden of entry and maintenance of such documents. Instead it was agreed that the lessons-learned concept should be implemented as a network. In this manner, links would be made to national lessons learned files, and similarly to the experiences and best practices of development agencies.

viii) *Lessons learned library site linked to the CBD CHM*

This is the ultimate outcome, and will depend on the evolution of the CBD CHM.

## 6. Revised Framework for Action

Based on the above discussions, a revised Framework was prepared with modified long term visions and with three (rather than four) simplified streams of action (attached - Appendix III). Subsequent discussion on funding and next steps were based on the improved Framework.

## 7. Funding for proposed actions

Each major project was discussed in turn to consider likely funding sources:

*i) Meta-database development, harmonising web sites, leading to an inter-convention web site and search engine*

- Bilateral donors were suggested as the most probable source of support
- Many secretariats felt that bilateral funding could be obtained from their host countries
- There was discussion over whether individual secretariats should approach bilateral agencies on their own behalf or on behalf of all five treaties. It was agreed that the latter was more likely to attract support.
- Total costs were estimated to be \$50-100K not including the highly variable cost of key-wording and entering "cover sheets" into the meta-database.

*ii) Lesson learned network:*

- Bilateral donors were suggested on same basis as i) above.
- Total costs to develop the prototype lessons learned web site was estimated in region of \$50,000-100,000.

*iii) Co-ordinated biodiversity information resources at the national level:*

This was seen as a much more substantial undertaking. A phased approach was agreed involving the following:

- Review and clarify reporting requirements of each convention;
- Prepare an integrated handbook for national reporting;
- In-country testing of the handbook (proof-of-concept);
- Pilot implementation in a range of countries to determine scale and nature of required capacity building
- Wider implementation.

## 8. Criteria were suggested for selecting appropriate countries, including:

- Countries should be party to all five conventions;
- Countries could be selected to achieve a reasonable distribution across the different regional in use by the conventions;
- Achieve a balance between developed and developing;
- Include small island developing states (especially because their size and resources may imply a closer relationships between responsible national agencies than may occur in larger countries);
- UNEP/GEF BDM Project has established some of the groundwork needed and so participating countries should be considered.

GEF PDF B funding was proposed for the development and proof of concept testing of the integrated reporting handbook - \$250,000 estimated.

Later stages of capacity building and pilot country-driven implementation would require \$2-5m. GEF would seem the most likely source, but costing will depend on the outcome of the pilot projects.

## 9. Process considerations

Three on-going processes were suggested by WCMC:

- high level harmonisation steering committee
- joint scientific panel
- joint information technology working group

It was acknowledged that there was a need for closer collaboration of the information management and technology staff of the secretariats. *CMS offered to convene and host a first meeting of such a group, to begin to discuss the issue of harmonisation of web sites.*

Collaboration on scientific issues, including species lists and vocabulary was seen as more difficult. The possibility was raised of having a single joint scientific panel, but there were believed to be too few issues in common for this to be worthwhile across all five treaties. The existing well defined CITES standard taxonomies were identified as a useful base that could be expanded to include standardised species lists for Ramsar and CMS. It was recognised that coordination between the chairs of the CMS Scientific Council and the CITES Nomenclature Committees would be beneficial.

There was concern that the current meeting workload of the secretariats was already very high. Apart from the considerations above, no firm commitment was made to form additional working groups or committees at this time. For the time being, it was hoped that WCMC could continue to move the ideas forward.

## 10. Workshop statement

The attached statement summarising the results of the Workshop was prepared and agreed by participants. This was primarily to assist in supporting information items at the CBD CoP in Bratislava that followed shortly after the Workshop, but could also serve as a useful summary for the participating and observing conventions.

## 11. Completion of the Feasibility Study

The participants indicated that the *Feasibility Study* report should contain:

- An analysis of current demands for national reporting, indicating overlap between information needs.
- Recommendations on harmonised web site contents to include: outline of a standard coversheet, options for selection of a controlled vocabulary for key-wording and searching.

- Recommended actions based on the workshop with an outline of project steps and costs.

Costing of a range of alternatives as originally specified in the terms of reference was not needed now that the options had been selected and refined through the consultation process.

The report should be completed in draft form in late May to leave sufficient time for comment and finalisation before the Convention Secretariats Meeting, scheduled for mid-June. It was agreed that WCMC should present the report to this meeting and also present to the secretariats a funding proposal to develop the project documents needed to implement the identified next steps. A proposal for WCMC to develop the meta-database would be welcomed for consideration within this package.

## List of Participants

Tony Gross  
 CBD Secretariat  
 393 St Jacques Street, Office 300  
 MONTREAL, Canada H2Y 1N9  
 Tel +1-514-287-7025  
 Fax +1-514 288-6588  
 email: [tony.gross@biodiv.org](mailto:tony.gross@biodiv.org)

Jose Pedro Costa  
 World Heritage Convention  
 UNESCO World Heritage Centre  
 7 Place de Fontenoy  
 F – 75352 PARIS  
 France  
 Tel +33 1 45 68 14 61  
 Fax +33 1 45 68 55 70  
 email:

Bill Phillips  
 RAMSAR Convention on Wetlands  
 Rue Mauverney 28  
 CH – 1196 GLAND  
 Switzerland  
 Tel +41 22 999 0171  
 Fax +41 22 999 01 69  
 email: [wrp@hq.iucn.org](mailto:wrp@hq.iucn.org)

Jim Armstrong  
 CITES Secretariat  
 15 Chemin des Anemones  
 CH – 1219 CHATELAINE-Geneva  
 Switzerland  
 Tel +41 22 979 91 47  
 Fax +41 22 797 34 17  
 email: [armstroj@unep.ch](mailto:armstroj@unep.ch)

Mario Hernandez  
 CITES Secretariat  
 15 Chemin des Anemones  
 CH – 1219 CHATELAINE-Geneva  
 Switzerland  
 Tel +41 22 979 91 47  
 Fax +41 22 797 34 17  
 email: [Mario.hernandez@unep.ch](mailto:Mario.hernandez@unep.ch)

Lorraine Collins  
 CITES Secretariat  
 15 Chemin des Anemones  
 CH – 1219 CHATELAINE-Geneva  
 Switzerland  
 Direct line: (+41 22) 9178156  
 Fax: (+4122) 797 34 17  
 email: [lorraine.collins@unep.ch](mailto:lorraine.collins@unep.ch)

Douglas Hykle  
 UNEP/CMS Secretariat  
 Martin Luther King str. 8  
 D – 53175 BONN, Germany  
 Tel +49 228 815 2401  
 Fax +49 228 815 2449  
 email: [Dhykle@unep.de](mailto:Dhykle@unep.de)

Mark Berman  
 UNEP ROE  
 Tel +41 22-909-5111  
 Fax +41 22 979-9089  
 email: [bermanm@unep.ch](mailto:bermanm@unep.ch)

Gregoire de Kalbermatten  
 Co-ordinator for Policy and Programme  
 Development  
 Convention to Combat Desertification  
 Tel +41-22-917-8416  
 email: [gdekalbermatten@unccd.ch](mailto:gdekalbermatten@unccd.ch)

Tim Johnson  
 World Conservation Monitoring Centre  
 219 Huntingdon Rd  
 Cambridge, CB3 0DL  
 UK  
 Tel +44 1223 277314  
 Fax +44 1223 277136  
 email: [tim.johnson@wcmc.org.uk](mailto:tim.johnson@wcmc.org.uk)

Ian K Crain  
 World Conservation Monitoring Centre  
 219 Huntingdon Rd  
 Cambridge, CB3 0DL  
 UK  
 Tel +44 1223 277314  
 Fax +44 1223 277136  
 email: [ian.crain@wcmc.org.uk](mailto:ian.crain@wcmc.org.uk)

Martin Sneary  
 World Conservation Monitoring Centre  
 219 Huntingdon Rd  
 Cambridge, CB3 0DL  
 UK  
 tel +44 1223 277314 fax +44 1223 277136  
 email: [martin.sneary@wcmc.org.uk](mailto:martin.sneary@wcmc.org.uk)



## Feasibility Study: Workshop Statement

### Background

The Secretariats of the five biodiversity-related conventions – CBD, CITES, CMS, Ramsar and World Heritage, and UNEP jointly commissioned the World Conservation Monitoring Centre (WCMC) to undertake a Feasibility Study on harmonising information management among the biodiversity-related conventions. The initiative contributes to the delivery of synergies among environmental treaties.

WCMC convened a workshop with representatives of the Secretariats of the biodiversity-related conventions, UNEP and observers from the Convention to Combat Desertification to review recommendations on harmonisation opportunities developed through consultation with individual secretariats.

### Identified priorities

There was consensus to pursue three programmes of work:

- Streamlined national reporting to facilitate national reporting to, and implementation of, the Conventions
- Development of a harmonised conventions information resource
- Development of a shared lessons-learned network

### Next Steps

It was agreed to take forward these programme areas through the following actions:

- Preparation of a GEF PDF (Project Development Funding) proposal addressing harmonised reporting requirements, and the development and pilot testing of integrated national reporting guidelines for the biodiversity related conventions.
- Development of funding proposals for considerations by bilateral agencies covering actions needed to develop an inter-convention web site and search engine, and the development of a lessons-learned network.
- Increased collaboration of the programme and technical staff of the secretariats to share experiences.

The Feasibility Study Report will be made available to the 8th Meeting of the Convention Secretariats.



